SEPTEMBER 1963
VOLUME 1, NUMBER 1

The NATIONAL BANKING REVIEW

A JOURNAL OF POLICY AND PRACTICE

Articles by

George S. Moore
Paul Samuelson
Wesley Lindow
Warren L. Smith
C. R. Whittlesey

- Comments on the Philadelphia - Girard Decision
- Current Banking and Economic Developments
- Current Legal and Regulatory Developments
- Book Reviews

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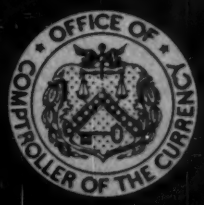

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A QUARTERLY PUBLICATION • WASHINGTON, D.C.

The NATIONAL BANKING REVIEW

A JOURNAL OF POLICY AND PRACTICE

VOLUME I, NUMBER 1, SEPTEMBER 1963

Edited by the Senior Staff of the Department of Banking and Economic Research, Office of the Comptroller of the Currency

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JAMES J. SAXON
Comptroller of the Currency

Published September, December, March, and June. Subscription rates: $4.00 per year; $1.00 per copy. Checks should be made payable to the Comptroller of the Currency. Subscriptions should be addressed to: Editor, **The National Banking Review**, Office of the Comptroller of the Currency, United States Treasury Department, Washington 25, D. C.

Manuscripts should be addressed to: Editor, **The National Banking Review**, Office of the Comptroller of the Currency, United States Treasury Department, Washington 25, D. C. A style sheet will be submitted on request to the Editor.

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Foreword

As a lasting tribute to the One Hundredth Anniversary of the National Banking System, we begin with this issue the publication of a new journal, *The National Banking Review*. The launching of any new venture is always the occasion for a declaration of hopes and purposes. Our aim is to afford a medium of expression to those who are concerned with public policies in the field of money and banking, and with the problems and practices of banking institutions.

These policies, problems and practices are often approached from different points of view in the academic world, the banking community, and the public regulatory agencies. They are also seen in divergent light by bankers, economists, and lawyers. It is our thought that through the pages of this journal there may be exchanges of ideas which will lead to better understanding, more effective teaching, and further explorations of problems and issues. If these aims are achieved, we will have reached our objective.

The *Review* will be open to those both within and outside the government. From time to time we shall publish the results of the work of our own staff. In all cases, manuscripts will be judged solely according to traditional standards of scholarship, and will not bear the official endorsement of this Office nor be appraised according to the policies of this Office.

James J. Saxon
Comptroller of the Currency

►GEORGE S. MOORE

International Growth: Challenge to U.S. Banks

The unparalleled growth in world trade and investment since 1950 has had a marked impact on the international activities of U.S. banks. The role of the American economy in, and its contribution to, this growth is impressive. Although the possibility that nations might revert to the restrictive trade practices and exchange controls of the Thirties and the immediate postwar period cannot be wholly ignored, the current emphasis is on programs and policies aimed at further increasing the volume of trade and investment.

It is against such a background that this article outlines recent trends in the international banking operations of U.S. banks, describes the history and structure of these operations, and relates them to the changing aspects of world trade and investment. The essential role that banking plays in international trade and investment is neither widely known nor thoroughly understood. It is hoped that greater awareness of the challenges and opportunities in the growing field of international banking will stimulate more U.S. banks to establish or expand their international activities.

George S. Moore is President, First National City Bank, New York, New York.

I. *The Setting*

U.S. exports reached $21 billion in 1962, and imports more than $16 billion. Both have virtually doubled since 1950. U.S. long-term private investments

Table I

U.S. TRADE AND INVESTMENT
(Billions of Dollars)

	Foreign Trade			Private Investment Abroad		
Year	Exports†	Imports	Total	Direct*	Portfolio	Total*
1950	10.0	8.9	18.9	11.1	5.7	16.8
1951	14.0	11.0	25.0	12.3	6.2	18.5
1952	13.2	10.8	24.0	14.0	6.3	20.3
1953	12.3	10.9	23.2	15.6	5.9	21.5
1954	12.9	10.3	23.2	16.9	6.7	23.6
1955	14.3	11.5	25.8	18.7	7.4	26.1
1956	17.3	12.8	30.1	21.7	7.9	29.6
1957	19.5	13.3	32.8	24.5	8.4	32.9
1958	16.4	13.3	29.7	26.5	10.3	36.8
1959	16.4	15.6	32.0	28.9	11.4	40.3
1960	19.6	15.0	34.6	31.8	12.6	44.4
1961	20.2	14.7	34.9	34.7	14.2	48.9
1962	20.9	16.4	37.3	n.a.	n.a.	n.a.
Avg. annual rate of increase	7%	6%	6%	11%	9%	10%
Increase, 1950-61	109%	84%	97%	212%	149%	191%

*excluding Cuba. †excluding military. n.a.—indicates not available.

Sources: Department of Commerce: Overseas Business Reports, April 1963; World Trade Information Service, March 1957; Survey of Current Business, August 1963; and Balance of Payments Statistical Supplement.

abroad totaled $49 billion in 1961, about three times the figure of thirteen years ago.[1] Private foreign direct and portfolio investments in the United States almost tripled in a decade to reach over $21 billion at the end of 1961. Table I shows U.S. trade and investment since 1950, the average annual rate of increase, and the total increase through 1961.

The figures in Table I reflect largely the amazingly swift economic recovery of industrial Europe and Japan in the postwar period. With that recovery came a wholesale dismantling of exchange controls and many other artificial barriers to trade and capital flows. This not only permitted resumption of international investment, but gave rise to new phenomena—large-scale U.S. private di-

[1] Secretary of the Treasury Dillon testified on July 8, 1963, before the Joint Economic Committee of the Congress that private investment holdings abroad of Americans now exceed $60 billion.

rect investment abroad, and sizable foreign investment in the United States. These developments reflect the internationalization of business and the economic interdependence of the free world.

The removal of the elaborate war and postwar structure of financial and trade controls has made the international capital market freer than at any time since pre-1914, except possibly for a brief period in the Twenties. U.S. banks are not only participating in this freer capital market; they are also helping to bring it about in a number of ways.

There are many indications that world trade and investment are now entering a period of freedom of international movement that will rival or even outshine the "golden era" ushered in by the repeal of the British corn laws in the mid-nineteenth century. Although international trade and investment gains over the past decade may not be equaled in terms of rates of growth in the present decade, there are significant portents of continued gains in trade and investment flows among nations.

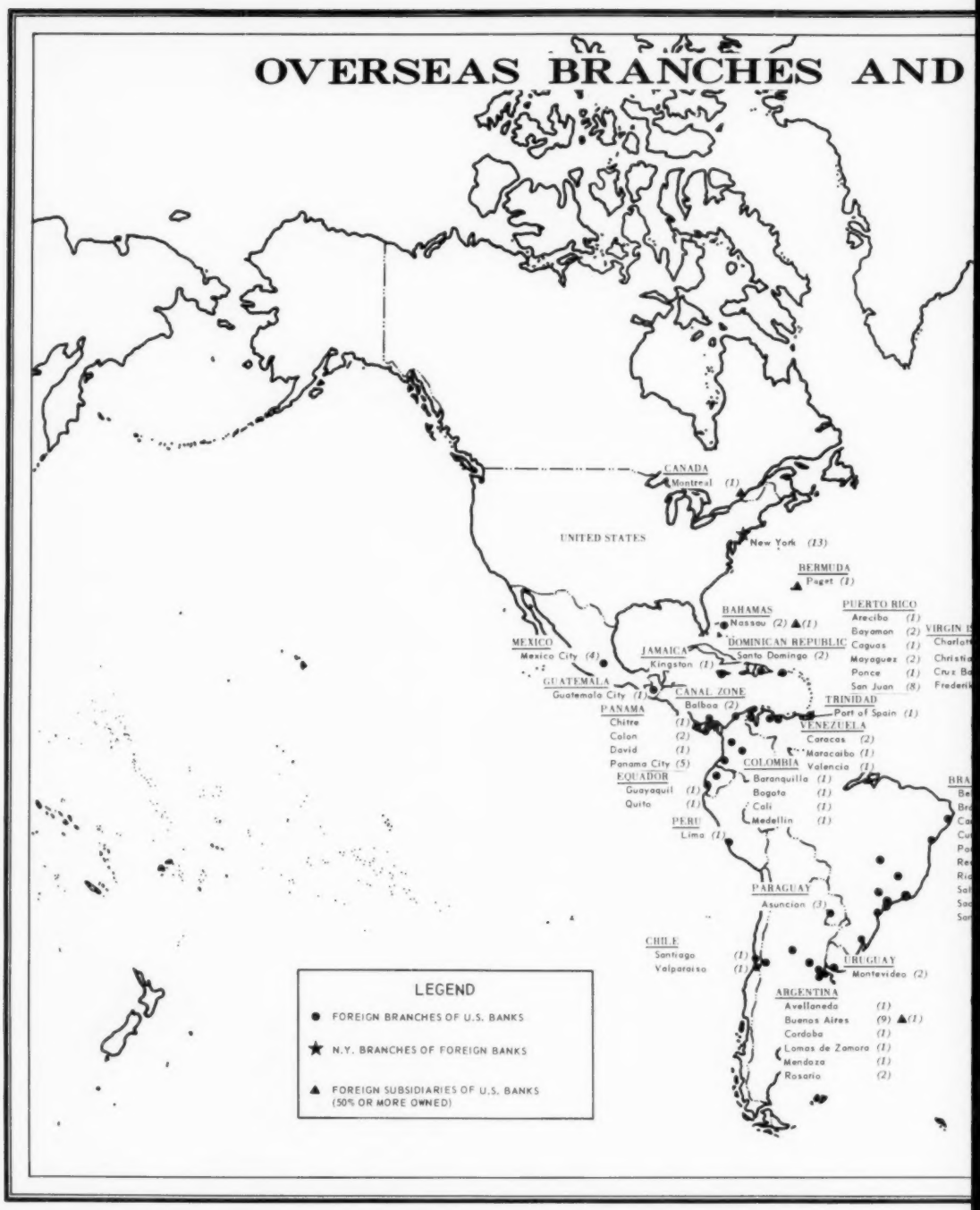
For example, in 1962, Congress passed the Trade Expansion Act, which authorizes the President to enter into agreements with other countries for reciprocal tariff reductions on broad categories of goods. Under this mandate, preliminary talks on tariff reductions between the United States and other free world countries got under way in Geneva in May 1963. While the outcome of these negotiations, which are scheduled to begin formally in the spring of 1964, is still some distance away, both tariff and non-tariff barriers are likely to be reduced as a result of the "Kennedy round" of trade negotiations.

The future volume of world trade and investment will also be influenced by the efforts of the less-developed countries of the world to achieve faster rates of economic growth. Even if the ambitious plans for economic development by national, regional, and international agencies are only partially successful, these will inevitably bring further expansion in the two-way flow of goods, services, capital and people across national boundaries. The United Nations Trade Conference, scheduled for March 1964, will seek to extend the benefits of expanding trade and investment more swiftly to the less-developed countries. Its findings may have an important bearing on the long-term outlook for international trade, which could in turn affect the magnitude of the international operations of U.S. banks. Of course, the aspirations of all countries for expanded trade could be confounded, if countries become unwilling or unable to make necessary adjustments and, instead, raise barriers against one another.

II. *The Growing Role of U.S. Banks*

Historically, there has been a close correlation between high levels of international trade and investment on the one hand, and international activities of U.S. banks on the other. During the Twenties when trade and investment were expanding, U.S. banks expanded abroad. During the Thirties when world depression and the drive toward autarky contracted world trade and investment, there was a corresponding contraction of the international activities of U.S. banks. The same correlation is evident today, although the data selected for charting show only a portion of the international business conducted by U.S. banks.

Short-term (under one year) claims of U.S. banks on foreigners at the end of May 1963 totaled $5.2 billion, up $2.7 billion—a 100 percent increase—since the end of 1958, when external currency convertibility was restored in Europe and the United Kingdom (Chart I). These short-term claims arise, for the most part, directly from the financing of international

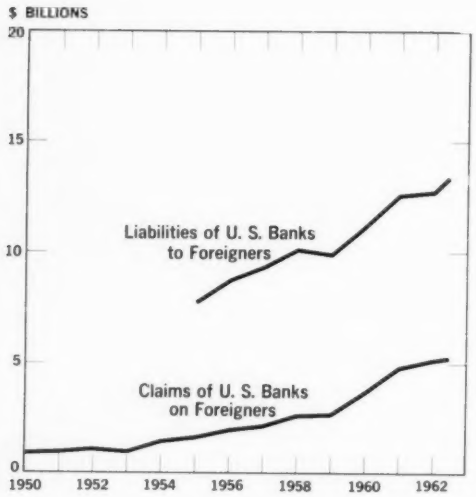


Source: Derived from information supplied by New York Federal Reserve District (Unpublished).

UBSIDIARIES OF U.S. BANKS
NETHERLANDS
Amsterdam (1)
ENGLAND
London (14) ▲(1)
GERMANY
Frankfurt (2)
Duesseldorf (1)
FRANCE
Paris (4) ▲(2)
BELGIUM
Brussels (2)
SWITZERLAND
Geneva (1)
ITALY
Milan (1) ▲(1)
LEBANON
Beirut (3)
PAKISTAN
Karachi (2)
SAUDI ARABIA
Jeddah (1)
INDIA
Bombay (1)
Calcutta (1)
Madras (1)
HONG KONG
Hong Kong (3)
THAILAND
Bangkok (1)
MALAYA
Kuala Lumpur (2)
SINGAPORE
Singapore (3)
JAPAN
Kobe (1)
Nagoya (1)
Osaka (3)
Tokyo (3)
Yokohama (2)
OKINAWA
Naha (1)
PHILIPPINES
Cebu (1)
Clark Field (1)
Manila (3)
GUAM
Agana (1)
TRUK ISLANDS
Moen (1)
NIGERIA
Lagos (2)
LIBERIA
Monrovia (1) ▲(1)
SO. AFRICA
Johannesburg (2)

Chart I

Short-Term Claims on and Liabilities to Foreigners Reported by U.S. Banks



Source: Federal Reserve Bulletin, July 1963.

trade. They consist principally of (1) loans made to and acceptances made for foreigners; (2) drafts drawn against foreigners where collection is made by banks; and (3) foreign currency balances held by banks and their U.S. customers.

Short-term liabilities of U.S. banks to foreigners, including international agencies and foreign governments, are chiefly demand and time deposits and bankers' acceptances.[2] Since the end of 1958, these have increased $3.2 billion, or 33 percent, to a total of $13.3 billion at the end of May 1963 (Chart I).

Bankers' acceptances drawn on and accepted by U.S. banks, primarily to finance international trade (Chart II), increased $1.5 billion, or 125 percent, in the three years from 1958 through 1961 to a total of $2.7 billion, after which they leveled off. The increase during those three years reflects the greater use of dollar acceptances, mainly by Japan, in the growing trade relationships of the world.

Chart III shows deposits in foreign branches of the New York clearing house banks, which accounted for over 75 percent of all foreign branches of U.S. banks in 1962. These, too, have increased markedly.

The factors described above point toward an international interdependence unprecedented since the emergence of the nation-state. American banks have already responded to these developments. With the dollar the leading international currency and the United States the world's largest exporter and importer of goods, services and capital, it is only natural that U.S. banks should gird themselves to play the same relative role in international finance that the great British financial institutions played in the nineteenth century. The fact that the Federal Reserve Board is in the process of revising Regulations K and M, which apply to the foreign operations of U.S. banks, is encouraging. To enable U.S. banks to play a leading role in international finance, they must be able to compete fully with the banks of other countries.

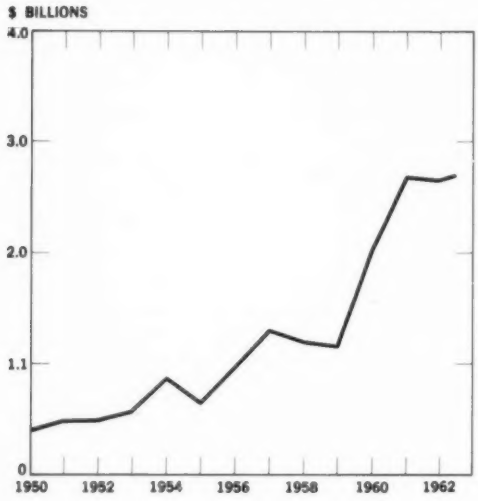
III. *History of U.S. International Banking*

To evaluate the changes now occurring in the international role of U.S. banks, it is helpful to glance briefly at the rela-

[2] U.S. Treasury bills and certificates are not liabilities of U.S. banks, and hence are not included.

Chart II

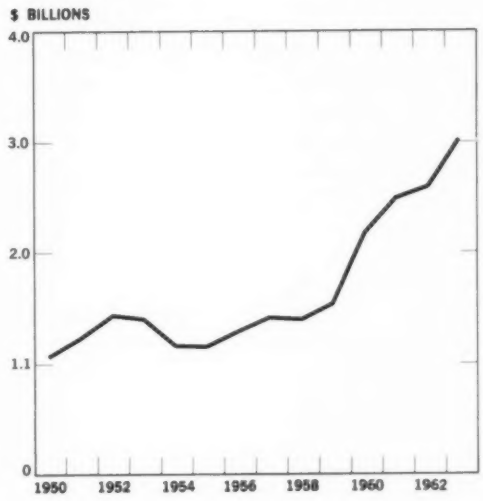
Bankers' Acceptances of U.S. Banks Outstanding



Source: Federal Reserve Bulletin, July 1963.

Chart III

Deposits in Foreign Branches of N.Y. Clearing House Banks



Source: New York Clearing House Association Statement (Weekly).

tively short history of U.S. banks in world business.

These banks entered the arena of international finance much later than did the banks of most major European countries. Throughout virtually the entire era of what has been termed "the golden age" of *laissez faire* in the nineteenth century, the international banking field was left almost completely to the giant financial houses of Europe. Before enactment of the Federal Reserve Act in 1913, U.S. national banks had no authority to enter into foreign operations. Nor were they empowered to accept drafts arising from the import and export of goods and services. Several states permitted banks incorporated under their laws to establish foreign branches, but prior to 1914 the operations of such branches were confined to a few state banks and "private" (unincorporated) institutions. The earliest of these was opened in London in 1887. By 1914, only four incorporated U.S. banks and two foreign banking corporations were active in the operation of foreign branches, with a total of 26 branches overseas. Competition from experienced European banks operating internationally may have deterred U.S. banks from becoming more active, but in any event the focus of business of U.S. banks was on domestic trade and investments. As the composition of U.S. foreign trade broadened to include more manufactured goods rather than just food and

raw materials, the need arose to finance trade in these products. In 1911 the National Monetary Commission reported the absence of U.S. banking operations in foreign countries as a major weakness in our financial structure.

The Federal Reserve Act of 1913 authorized national banks to accept drafts, and Section 25 of the Act authorized such banks to establish branches abroad under certain conditions and subject to approval by the Federal Reserve Board. Thus the fundamental banking law of this country for the first time permitted national banks to take advantage of the transformation of the United States from a debtor to a creditor nation. The onset of World War I rendered it virtually impossible for national banks to enter the international field, and it was not until the upsurge of international trade and investment in the Twenties that U.S. banks as a group became seriously involved in international operations. Even this period of comparatively free trade, however, did not stimulate as much interest in the international scene on the part of U.S. banks as does today's increased international business.

The recent expansion of international operations of U.S. banks has been manifested in a number of ways. The number of overseas branches of United States banks increased from 95 in 1950, to 145 at the end of 1962 (154 as of July 1963). U.S. banks which operate abroad exclusively through foreign correspondent banks, rather than through their own branches, are also handling more business than ever before. In addition, bank-owned Edge Act and Agreement corporations, whose foreign operations are described later, have increased from a total of 6 in 1955, to 26 at the end of 1962, and 32 at the end of July 1963. (See Table II.)

Although these developments are impressive, they leave unanswered two significant questions: Are U.S. banks participating as completely as they might in international banking; and are they gearing their operations for further growth in world trade and investment?

Table II

International Operations of United States Banks

Year End	Foreign Branches	Edge Act & Agreement Corps.
1950	95	5
1955	111	6
1960	124	15
1962	145	26

Source: Information supplied by New York Federal Reserve District (Unpublished).

Very few U.S. banks have direct branches abroad, even today. The world map on pages 4 and 5 shows the location of foreign branches and subsidiaries of U.S. banks. Eight banks operate 14 branches in London and four banks each operate a branch in Paris. Among U.S. banks, only First National City Bank, Bank of America, and Chase Manhattan Bank perform large-scale commercial banking through broad networks of foreign branches. Many banks abroad have older and well established overseas branch systems, the most extensive being those of Canada, which operate extensively in Latin America; British overseas banks which virtually encircle the world; and the following individual banks which specialize in geographical areas: The Standard Bank and Barclays Bank D.C.O. in Africa; Bank of London and South America in Latin America; Hong Kong and Shanghai Banking Corporation and Chartered Bank; and their respective affiliates in the Far and Middle East.

It should be noted, moreover, that most U. S. banks conduct their banking activities abroad through foreign correspondent

banks rather than through their own branches supplemented by correspondent relationships. Many banks maintain overseas representatives to insure close liaison with foreign banks.

IV. *International Services of U.S. Banks*

The response to expanded world trade which U.S. banks have already evidenced can be traced directly to the kind of services they perform in international banking. Since the days of the Hanseatic League, one of the primary functions of lending institutions has been to supply the financing for international trade and services. The basic function of banks in world trade today is still financing exports and imports by extending short- and medium-term credit. This is done through specially tailored methods, such as commercial letters of credit and bankers' acceptances. They also supply medium- and long-term investment funds. But banks also extend services that are equally essential—the provision of information and know-how. Banks offer customers doing international business credit information and data on foreign markets, help locate potential partners, selling agents and customers, and assist in overcoming language and currency obstacles. In brief, banks bring buyer and seller together and create conditions under which the varying risks for credit and transfer of funds can be accepted by all concerned. Their services are offered to both American and foreign exporters and importers. In the area of overseas investment, businessmen often start by calling on the foreign department of a U.S. bank to obtain economic analyses of market opportunities, assessments of the various risks involved, introductions to potential foreign associates, and short- and medium-term loans.

The reliance of the Export-Import Bank on the commercial banking system to operate its new export insurance and export guarantee programs offers one illustration of partnership activity between government and private banking institutions. These programs perform a vital role in financing U.S. exports. Through them, the Eximbank assumes certain risks which private lending institutions would not be justified in taking. This greatly facilitates the financing of U.S. exports, thus helping us to compete more effectively in foreign markets by placing our exporters on an equal footing with those of Western Europe, where such insurance is well established. The Eximbank offers five types of export insurance or guarantee programs for the extension of short- and medium-term credit. Under four of these, jointly with the Foreign Credit Insurance Association (organized by over 70 private insurance companies), export credit insurance is issued to the U.S. exporter, enabling him to obtain financing more readily from commercial banks. Under the fifth, a guaranty is extended directly to the lending institution. All five programs insure against currency inconvertibility, import or export license restrictions, confiscation, and loss stemming from war or revolution. The programs also insure against certain commercial risks, such as insolvency or protracted default of the foreign buyer.

When a U.S. company sells its product to a foreign buyer under the Eximbank programs, the financial pattern is for the foreign buyer to advance up to 20 percent of the total costs; the American supplier to carry 15 per cent of the financed portion; and a commercial bank to finance the remainder, or 85 per cent of the financed portion, under Eximbank guarantees. Commercial banks also participate with the Eximbank in extending credit to foreign borrowers under its program of lending for specific projects.

In addition, the international services of U.S. banks are often called upon by international financial institutions. In fis-

cal year 1962, commercial banks participated in 22 development loans made by the World Bank. This compares with 13 such participations in the fiscal year 1957. Edge Act and Agreement corporations of U.S. banks have joined with foreign banks in partnerships with the International Finance Corporation to participate in financing industrial development banks and, along with the IFC, have provided equity capital for a growing number of industrial enterprises in the developing countries.

U.S. banks have also helped foreign governments to carry out financial stabilization programs. Upon reaching an agreement with the International Monetary Fund on the terms of an over-all stabilization program, foreign governments have on occasion approached U.S. banks for additional funds required beyond those extended by the IMF. Since the amounts involved have run into tens of millions of dollars, several banks have usually participated in the financing, which has taken the form of two-to-four-year term loans. One bank has usually taken the lead in organizing the consortium. In most cases, the foreign government has utilized the bank loans before drawing on IMF funds and has repaid the banks before the IMF was reimbursed.

Increased world trade and investment are rapidly altering and expanding the structure of U.S. international banking; more banks are organizing foreign departments; more correspondent relationships are being formed abroad; more branches are being opened; more Edge Act corporations are being established; and more foreign subsidiaries are being acquired.

V. *Edge Act and "Agreement" Corporations*

Important avenues through which national banks engage in international banking and finance are the so-called Edge Act and "Agreement" corporations. An amendment to Section 25 of the Federal Reserve Act, passed in 1916, authorized national banks, with permission of the Federal Reserve Board, to invest in corporations chartered either under United States or State law and engaged principally in foreign banking. State-chartered foreign banking corporations were eligible for such investments only where they entered into an agreement with the Board concerning the conduct of their operations. Such corporations have become known as "Agreement" corporations. Provision for federal incorporation of foreign banking and financing was not provided until 1919, under the Edge Act,[3] and such corporations came to be known as Edge Act corporations.

These amendments to Section 25 of the Federal Reserve Act were designed to provide greater flexibility to the overseas operations of U.S. banks. No less than 18 banking corporations were chartered, either by states under agreements with the Federal Reserve Board, or by the Board, between 1919 and 1929. But by the early Thirties all but two had been liquidated or absorbed by other corporations. Only recently have U.S. banks again taken the route of Edge Act and Agreement corporations to broaden their financial services and enhance their flexibility to participate in international transactions. As late as 1955, there were only six Edge Act or Agreement corporations. By July 1963, U.S. banks had formed 32 such corporations. Their growth has been spurred by the increase in the volume of international business and by the variety of financial transactions engaged in by foreign banks.

Both Edge Act and Agreement corporations are subject to the provisions of Regulation K of the Federal Reserve Board.

[3] Senator Walter E. Edge of New Jersey sponsored this provision, Section 25(a) of the Federal Reserve Act.

Under that Regulation, two types of corporations have been established—banking and financing.

The *banking* corporation is empowered to engage in the entire range of U.S. banking activities overseas, with operations at home limited to those incidental to foreign business. In practice, U.S. banks have also utilized the Edge Act banking corporation provisions to acquire and hold stock in foreign banking institutions. The Banca d'America e d'Italia of Milan, for example, is a subsidiary of the Bank of America, New York, which is the Edge Act banking corporation of the Bank of America National Trust and Savings Association, San Francisco. The Bank of Monrovia in Liberia is wholly owned by the International Banking Corporation, First National City's Agreement banking corporation. Seventeen U.S. banks now have such Edge Act (or Agreement) banking corporations.

Edge Act *financing* corporations are chartered to make foreign investments other than in banks. The few financing corporations established in the Twenties and the Thirties were not very active. Revived interest in this approach to expand the international activities of U. S. banks did not occur until the mid-Fifties, and coincided with the postwar dismantling of exchange controls and the increased international flow of private investment. As of July 1963, fifteen U.S. banks had organized Edge Act financing corporations.

The Federal Reserve Board is currently in the process of revising its Regulation K, which applies to banking and financing corporations, to permit greater flexibility in their operations. This is particularly significant in light of the anticipated growth in international banking activities and the need for U.S. banks to compete effectively. The old Regulation requires that each equity investment made by an Edge Act or Agreement corporation be subject to the approval of the Federal Reserve Board, either under a limited general consent given to each corporation or on a case-by-case basis. It is anticipated that the revised Regulation K will permit corporations full flexibility to make equity investments, without the cumbersome procedure of approval, up to the limit permitted by the statute (10 per cent of capital plus surplus). Such investments would, of course, remain subject to review by the Federal Reserve Board.

The total activities of Edge Act financing corporations are small compared with the U.S. share of world trade and investment. Current regulations could usefully be liberalized so that these corporations may play a wider role in providing equity financing for economic and industrial development purposes.

VI. *Establishing International Operations*

The three largest U.S. banks have sufficient business in certain trading areas abroad to handle transactions through direct branches, working in close harmony with correspondent banks in the particular countries involved. The decision whether or not to establish a new branch abroad requires the careful assessment of a number of factors additional to those considered in establishing a branch domestically. Analysis starts with the usual economic considerations that would be examined in domestic expansion —population, industry, transportation, volume of business activity, estimates of deposits, growth projections and the evaluation of existing and prospective competition. Important considerations are the volume of international trade and investment transactions that the branch could be expected to service, and the number and size of U.S. and other foreign firms located in the region of the country where the branch would be located. But beyond this, other more complicated factors must be assessed. These include the primary factor of political

stability in the over-all investment climate. To this must be added the laws, regulations and banking customs of the country concerned. Highly important is the receptivity towards the establishment of a foreign bank displayed by national and local officials. A careful estimate is also made of the contribution that a branch of a U.S. bank could make to the economic objectives of the country. Finally, approval to establish a foreign branch must be obtained not only from the Federal Reserve Board, but also as a rule from the authorities of the country in which it is to be located.

The experience of large banks with direct branches abroad has made them aware that, to be truly international, financial centers such as New York City must welcome branches of foreign banks. To enhance the scope, liquidity and importance of New York as a world financial center, members of the New York Clearing House Association actively supported state legislation passed in 1961 permitting foreign banks to open branches in New York State. Ten foreign banks[4] have taken advantage of the State's new open-door policy. Table III lists the foreign bank branches in New York.

The operation of branches by foreign banks constitutes only a small percentage of foreign bank activity in the U.S. In addition, over 20 foreign banks have agencies in New York City, with combined assets in excess of $3 billion; and 30 other foreign banks maintain resident representatives in the U.S. The branches and agencies of foreign banks in the U.S. are not subject to Federal Reserve Board regulations dealing with such important matters as reserves and interest rates.

Canadian banks are especially well represented in the U.S., with 28 offices.

Table III

Foreign Banks with Branches in N.Y. (As of June 1963)

Bank	No. Branches
Banco de Ponce (P.R.)	2
Banca Nazionale del Lavoro (Italy)	1
Banco Popular de Puerto Rico	1
Bank Leumi le-Israel	1
Bank of London & S.A. Ltd. (Br.)	1
Israel Discount Bank Ltd.	1
Netherlands Trading Society	1
Société Générale (Fr.)	2
Swiss Bank Corp.	2
The Chartered Bank (Br.)	1

Source: Information supplied by New York State Banking Commission (Unpublished).

In addition to branches in Seattle, Washington, and Portland, Oregon, and 2 subsidiaries in California with offices in San Francisco and Los Angeles, Canadian banks own 5 trust companies located in New York City. New York is also the headquarters for seven Edge Act corporations owned by U.S. banks located outside of New York.

Should U.S. banks wish to add international activities to their domestic operations, they should be aware of special problems that the complexities of international banking bring. The most important is the difficulty of finding experienced personnel capable of surmounting the differences of language, geography, and laws and customs that international operations bring. Even U.S. banks with years of experience in the international field find that their biggest difficulty is the selection and training of personnel.

First National City Bank, for example, employs 8,000 people abroad in 33 countries. Less than 4 percent are American

[4] Under New York State law, the two Puerto Rican banks are defined as foreign banks.

citizens assigned to foreign branches from the New York head office. Promising foreign nationals are brought to the New York City headquarters for extended periods of intensive training before returning to their own countries. Clerical as well as executive training programs identical with those conducted at New York headquarters are conducted in the overseas branches.

Among other special factors that arise in international banking are these:

(1) The problem of dealing in many currencies requires specialized knowledge of exchange rates and their movements. In some countries with unstable currencies U.S. banks must consider the risks and consequences of a possible devaluation.

(2) Many countries apply exchange controls over all or a part of their international financial transactions. Exchange controls limit foreign banking operations by impeding and sometimes preventing transactions involving foreign exchange. Rules and regulations of countries engaged in exchange controls are constantly changing. They are highly technical and must be lived with before they can be understood thoroughly.

(3) The possibility of expropriation is always present. U.S. banks at one time had important branches and interests in Czarist Russia, in mainland China, and most recently in Cuba. Unless accompanied by prompt and adequate compensation in convertible currency, which did not occur in the cases cited, the risk of expropriation inhibits overseas expansion. As a practical deterrent to such possibilities, the Hickenlooper amendment to the Foreign Aid legislation, requiring that U.S. aid be terminated in the event of expropriation without adequate compensation, is proving effective.

(4) The unavailability of credit information comparable to audited statements and registration statements of the SEC makes it difficult to evaluate a foreign credit risk. The general reluctance of foreign businesses to disclose information comparable to that which is readily available in the United States adds to the difficulty of judging creditworthiness abroad.

(5) Restrictive banking regulations limit U.S. banking operations abroad. U.S. banks operating branches abroad have suffered competitive disadvantages because they are subject not only to local regulations, but also to those of our own government.

Branches of national banks operating abroad are supervised by the Federal Reserve Board and subject to Regulation M. The provisions of Regulation M had, in effect, applied the same standards and structure to the operations of foreign branches of national banks as are applied to branches operated domestically. But laws, customs and practices for banking institutions vary widely from country to country. Until now the limitations of Regulation M have put foreign branches of national banks at a competitive disadvantage in some countries. European banks, including British banks, with large international commercial operations, have enjoyed a far greater latitude than have national banks in competing effectively within the laws and customs of the country in which a branch is located.

To correct this competitive disadvantage, the Congress in 1962 amended Section 25 of the Federal Reserve Act by enacting Public Law 87-588, "An Act to Improve the Usefulness of National Bank Branches in Foreign Countries." This amendment authorizes the extension to foreign branches of "such further powers as may be usual in connection with the transaction of the business of banking in the places such foreign branches shall transact business." Further powers newly

authorized by law include authorization to (1) execute and deliver guarantees; (2) accept drafts on bills of exchange; (3) purchase and hold certificates of ownership issued by central banks; (4) buy and sell obligations of the national government of the country in which the foreign branch is located; and (5) take and record liens on real estate.

Effective August 1, 1963, the Federal Reserve Board revised Regulation M giving national banks these broader powers in operating their overseas branches. The extended powers to acquire and deal in certain securities will, under 12 U.S.C. 335, also benefit foreign branches of state member banks. Still termed "unnecessarily restrictive" by the Comptroller of the Currency, the revision nevertheless is a step in the right direction. To enable U.S. banks to compete effectively with foreign banks, both Regulations K and M must be liberalized to provide the same flexibility of operations as foreign banks enjoy.

VII. *Conclusions*

It would be easy to overemphasize the special problems and risks encountered in foreign banking. Actually, they are similar to those which must be faced and overcome successfully by all business corporations with global operations.

Despite the many issues in international trade and finance that have yet to be surmounted, the trends toward continued world growth are plain for all to see. These will continue to pose a challenge to U.S. banks. But they also present opportunities for broadening the services that U.S. banks can provide to the business community, to the nation, and to the free world. As American business increasingly looks outward for expansion, so U.S. banks will find international operations a profitable experience.

►PAUL SAMUELSON

Reflections on Central Banking[1]

Contrary to the opinions of many contemporary economists (and to some of my own earlier views), I believe that monetary and credit policies have great potency to stimulate, stabilize, or depress a modern economy. This belief is based on my evaluation of the tremendous amount of empirical data given by (1) history, (2) current statistics, and (3) case studies of business behavior. These data are diverse, conflicting, and often inconclusive, and therefore have to be interpreted with the help of all the tools of economic analysis inherited from the past and developed by the present generation of scholars.

In thus differing from the pessimists, I want to make clear that I am *not* agreeing with that much smaller group of older economists who think that monetary policy by itself is the sole or principal mechanism for controlling the aggregative behavior of a modern economy. I believe such a view to be factually wrong or irrelevant; and would add that, even if monetary policies truly had this exaggerated degree of potency, I would not deem it optimal social policy to rely exclusively or primarily upon that weapon alone.

Today all experts dismiss the ancient view that *laissez-faire* can properly hold in the field of money and banking. "Money will not manage itself." Banking institutions are not perfectly-competi-

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[1] This article is based upon the author's previously unpublished testimony before the Canadian Royal Commission on Banking and Finance in October, 1962.

tive self-regulating enterprises that can be free from strict governmental regulations and controls. They are "public utilities vested with public interest" and the same is true in equal or lesser degree of various financial intermediaries, such as savings institutions, finance companies, and insurance concerns. Let me make clear that all this is stated from the standpoint of one who philosophically values individual freedoms. A person who cheerfully accepts the idea of direct price, wage, and production controls can afford to give a relatively large measure of freedom to credit institutions; but one who wishes to minimize (except in emergency periods) the use of such direct controls will realize that we maximize total freedom in a society by limiting it in the areas which crucially determine the aggregate of effective demand.

I must firmly disassociate myself from the small but important group of writers who, agreeing that money will not run itself, go on to argue that it ought to be determined permanently by certain automatic formulas. Sometimes this is put in the fancy language of "rules versus authorities," or "laws versus men," or "automaticity versus discretionary action." Of course, no one, myself included, will admit to favoring arbitrary caprice of bungling rulers over the even-handed justice of well-formulated rules. If every form of explicit cooperative action set up by men is bound to be completely nearsighted, venal, and blundering, then recourse to astrological rules might pragmatically be defended—although no wise man could have any secure belief that such bungling human beings would ever bind themselves and stay bound to such arbitrary mechanisms. The vicissitudes of ancient coin standards—which were at the mercy of the accidental discovery of precious metals in Latin America, Australia, California, Alaska, South Africa, and now Soviet Russia—would certainly be preferable to some forms of "managed money."

In practice, however, there have always been—for both good and evil—substantial departures from any automatic coin, bullion or other kind of gold standard. In principle, the choice has never been between discretionary and non-discretionary action: for when men set up a definitive mechanism which is to run forever afterward by itself, that involves a single act of discretion which transcends, in both its arrogance and its capacity for potential harm, any repeated acts of foolish discretion that can be imagined. Since I have argued elsewhere the philosophical principles involved in this choice and have never seen any written refutation of these arguments by adherents of the "automaticity" school, I shall merely state here that the relevant choices have to be made pragmatically in terms of the goodness or badness of behavior patterns that result from various kinds of discretionary action.

Specifically, consider the suggestion of a money supply which is to grow at exactly 3 per cent per year, a policy advocated by some who think no other actions would then be required. Suppose this had been enacted in the United States in a random recent year, without knowledge of the balance-of-payments problems just ahead, and without knowledge of the massive shift to time deposits such as we have been experiencing as a result of both raised interest-rate ceilings on such deposits and the natural shift to such deposits as interest rates generally rise. The results could have been quite bad in comparison with what actually happened; and if the balance-of-payments situation had, for unpredictable reasons, been a great deal worse, the results could have been disastrous. I realize the adherents of such proposals will argue that such dire results might have been avoided if there had been floating exchange rates, perfectly flexible wage rates, and never, never any interest-rate or other ceilings.

But since we do not and shall not live in such a never-never land, legislating part of the package would surely do more harm than good.

I. *The Quantity Theory and Monetary Policy*

There are many reasons why any automatic gadget can be improved upon by decision-makers, even by fallible decision makers. This statement will be denied by those who are firm believers in the ancient Quantity Theory of Money. If it were true *in a causal sense* that there is an invariant relationship between, on the one hand, total dollar income and spending, and, on the other, the supply of money defined in such a way as to be capable of predetermination by the central bank, then an autogyro which kept total money supply growing smoothly would, by hypothesis, keep total money income growing smoothly. While I know that some modern scholars have tried by historical studies to establish an empirical concomitance between money supply and aggregate income, let me simply state here that I find the implied proof of a simple, controllable, causal proportionality relationship unconvincing.

It is the easiest sport in the world to shoot down any crude formulation of the Quantity Theory. But I think it quite illegitimate to conclude from this what the Radcliffe Committee and many modern scholars have stated: namely, if total money supply, M, does not invariably create an exactly proportional total income and product because the income velocity of circulation of money, V, is not a constant—it follows that we should turn our attention away from conventional central bank controls and rely instead upon some global concept of "liquidity." As will become evident, I attach considerable importance to various concepts of liquidity.

But I think it wrong to believe that recognizing such concepts should undermine the belief that conventional central bank operations of open-market purchase and sale of securities, discount lending, and reserve-ratio changing are likely to have important effects upon the total of investment and consumption spending. Emphasizing "liquidity" quite properly serves to debunk a crude quantity theory, and it thereby scores a fatal point against advocates of simple automaticity gadgets. But it leaves the position I am here expounding unscathed, and it is for this reason that a number of reviewers have criticized the Radcliffe Report.[2]

Because of the human temptation to deify any concept that has been defined and to tend to regard, as approximately constant, the last variable that one has defined, I do not find the velocity variable, V, a very useful one. But older economists did, and some younger ones are beginning to again. So I shall restate the heart of the matter in such terms.

If the requisite V were a strict constant, $P \times Q$ would, by hypothesis, be exactly proportional to the requisite definition of money, M. Experience shows that V is not a constant: it shows certain historical trends in the long run; in the course of the business cycle, it has generally shown fluctuations that are sympathetic with the cycle itself, rising in good times and falling in bad. After more studies have been made, I believe V will also show certain fluctuations with interest rate and other conditions, tending, other things equal, to rise when interest rates are high and the opportunity cost of cash balances is great, and tending to fall when short term investment opportunities all have a very low yield.

The behavior of V will also be quite sensitively affected by the particular concept of the money supply that is adopted,

[2] See John Gurley, "The Radcliffe Report and Evidence," *American Economic Review* (September, 1960).

being quite different if currency alone is considered (as with the nineteenth century Currency School and Edwin Cannan in the 1920's) than if demand deposits are included and various categories of time deposits and close money substitutes are, or are not, included in the definition of money. Some of the movements of V will be erratic and relatively unpredictable; others will be in some measure predictable. In particular, although they are operationally hard to identify in the empirical record, certain changes can always be expected in V that are themselves induced by the change in M itself and, certain other things being held constant, are part and parcel of such a change in M. Some sensible probability statements can be made about these induced changes in V at various phases of the business cycle and at various time points in history.

Now, if it were the case that recognition of the importance of money substitutes and various concepts of liquidity were to imply that changes of M in one direction could be expected to be followed systematically by opposite changes in V just large enough to offset any resulting induced changes in $MV = PQ$, then the casual reader of the Radcliffe Report would be right in thinking that central banks are unable to affect significantly aggregate spending by conventional open-market and lending operations. But none of the testimony or arguments in connection with the Radcliffe Committee succeed, in my judgment, in establishing a presumption in favor of this doctrine of induced-velocity-changes-that-just-offset-money changes.

Not only is this not demonstrated in the historical record, but, in addition, such a finding is not in accordance with that type of analysis which is thought to have displaced the old Quantity Theory. For, in the various Keynesian models, there is generally a presumption that an increase in M engineered by the central bank will cause such a reduction in interest rates and such increases in credit availability as to generate an increase in investment and total spending just large enough to create an extra level of income which would absorb in transaction balances the new increment of money created. While the mechanism just described holds for the most primitive Keynesian model, the same conclusion is found to be valid for more sophisticated models, which pay explicit attention to wealth and other stock effects and which distinguish a long chain of assets that range from being very near to money (like short-term government bonds) to being very illiquid and difficult to sell or evaluate (like built-in machinery that is highly specific to a particular location and owner). And the qualitative nature of the conclusion—that the central bank can expand spending by expansive open-market, lending, and reserve-ratio fixing operations—will still hold, even after we have admitted the existence of relatively-less-controlled financial intermediaries such as savings banks, finance companies, insurance companies, mutual or unit-trust funds, and various forms of equity and loan participants.

With his permission, I will refer briefly to an interesting demonstration by Professor James Tobin of Yale in an unpublished manuscript[3] privately circulated several years ago. Suppose that we have a chain of substitutes, which instead of being called tea, coffee and cocoa are called bank money, short-term bonds, long-term bonds, insurance assets, and so forth; call them M_1, M_2,—and suppose that their respective prices are N_1, N_2, ... If the central bank could decrease all of the M totals together by operations and fiats that apply to insurance companies as well as to banks and to all financial intermediaries, then no one doubts that the total of "liquidity,"

[3] Cowles Commission Study Paper #63.

however measured, would go down and that this would, other things equal, tend to have a depressing effect on aggregate spending and general inflationary pressures. Specifically, with every M_i decreasing because of direct central bank action, the unweighted or weighted sum of the M's and every other recommended measure of "liquidity" would also go down. But now suppose that the central bank can only decrease directly M_1, having no direct controls on the reserve-ratios or totals of any other sectoral M_i. A reader of the whole of the Radcliffe Report and Hearings might be forgiven for inferring that in this case nothing positive could be said about the ability of the central bank to affect total liquidity, as measured by some kind of total of the M's or weighted-sum of the M's or other measure of liquidity; and hence, that we should abandon the simple notion that a modern central bank can by its conventional operations push aggregate spending in a desired direction. Tobin, however, in his unpublished memo, has shown that, provided the M's are all *substitutes* (in the sense that the excess demand for each M_i *de*creases when its own N_i price rises but *in*creases when some other M_j's N_j goes up—as, for example, that an isolated increase in the price of short-term bonds should cause less of them to be demanded and more of long-term bonds to be substituted for them), then the central bank can cause *every* M_i to go down by simply depressing M_1! (The theorem is like the Leontief one which says that raising the consumption requirements for hats must raise gross output of every good in a well-behaved input-output system, and like the Metzler-Keynes theorem that an increase in domestic investment in one country must to some degree raise outputs everywhere in a well-behaved many-sector multiplier model.) This important Tobin result accords well with intuition. One should not push it beyond its actual statement: each indirect effect is, generally speaking, weaker than each direct effect, *and* the central bank may have to push undesirably harder on M_1 to get the same change in overall M's than it would have to do if it were given direct powers to affect financial intermediaries.[4] Later I shall have to point out some important limiting cases where the potency of central bank action becomes quantitatively zero or almost zero.

It has often been said that monetary policy is more effective in contracting an economy than in getting it to expand. There is an important grain of truth in this observation. Thus, when the bank rate or the discount rate is six or seven per cent, and the commercial banks' excess reserves are at a minimum and the business community is heavily dependent upon bank borrowings for its current investments in inventories and other items, then further restrictive action by the central bank can, by a variety of channels, cut deeply into the aggregate of investment and total spending.

On the other hand, in a period like the 1930's, when the market yield on short-term government securities has already been driven down to a fraction of one percent, and when banks have copious excess reserves and business firms are regretting their past investing and regarding the marginal profitability rate on all further investments as negative, there would be little potency indeed in conventional central bank operations. (Buying short-term bonds in the open market would then merely take from the community a very close money substitute and replace it by

[4] This corresponds to a theorem that, in appropriate units, $\partial N_i/\partial M_i > \partial N_j/\partial M_i > 0$ for certain systems of Leontief, Metzler, and Mosak-Hicks type, as has been recognized by diverse writers, such as Hicks, H. Johnson, Morishima, and others. It does not deny that in certain limiting cases of perfect substitution these effects will be equal, or that in certain limiting cases one or both may be zero.

money itself.) This would not have much further depressing influence on the interest rate structure and would not make credit more readily available to borrowers (who are in any case virtually non-existent and automatically regarded as suspiciously risky chaps, if they should come forward with a loan application).

From the technical fact that monetary policy works more effectively at high than at low interest rates, no one should make the mistake of concluding that the goal of policy should be to avoid low rates. Forks must be made to fit fingers, not fingers, forks: when an economy will suffer from tight markets and the technician will benefit, it is of course the technician who must properly give way.

This last case then is one where an induced change in velocity can be expected to wipe out almost completely any contrived change in money narrowly defined. It is the case often referred to as the Depression-Keynes model, where (1) there is a liquidity trap near to a zero rate of pure interest, at which the Keynesian liquidity preference schedule is practically infinite in elasticity so that the system will absorb great amounts of M at practically the same interest rate and credit-availability; and/or where (2) the rate of investment spending is almost completely inelastic with respect to changes in the interest cost and availability of credit.

I believe, in the face of some doubters, that such a depression model has occasional empirical validity—certainly in the short run and possibly for a vexingly long time. Moreover, bitter experience in the United States of the last few years leads one to suspect that it is not always so easy to engineer a deepening of capital by conventional central bank operations, even when one is not in a deep-depression liquidity trap: for, even when gilt-edge rates are lowered farther and farther, the effective profit rates that businessmen must anticipate to get them to make somewhat risky investments may remain quite high—say 15 per cent before corporate taxes or 8 per cent after taxes. Thus, even massive open-market purchase of government bonds may not be able to push the system down through a high-profit floor that acts rather like the older Keynes liquidity trap interest floor in keeping investment resistant to expansion.

I know it can be argued that the central bank, provided it is ready to abandon notions of feasibility and force the market rates of interest up to 40 percent in boom times and down to zero or, for that matter, down to negative rates of interest, can control the amount of total money and spending activity to any desired levels, regardless of adverse fiscal policies and adverse behavior propensities on the part of business and the public. Personally, I consider it irrelevant to talk about 40 percent bank rates, and in any case undesirable to put the burden of such extreme adjustments on the narrow sectors most affected by monetary actions. And as far as forcing extremely low interest rates is concerned, it is simply not true that lending money to people at negative interest rates is guaranteed to result in any desired expansion in spending: making gifts might, but if these are loans that have to be paid back, it would be rational for people to borrow at negative interest rates and just hold the proceeds in safety lock boxes, thereby earning a handsome yield. The total of something called M might rise, but that does not mean that the requisite MV can be achieved in any short period by *conventional* central bank operations.

My purpose here is not to score a point against some extreme Quantity Theory formulation, but to call attention to the fact that in many social situations a well-running democracy will want its central bank to engage in *unconventional* activities. (Examples: in the 1930's Federal Reserve Banks made loans directly to certain small businesses: in a future bal-

ance of payments crisis, the central bank might want to provide certain guarantees and investment insurance to desired domestic investments, while keeping up the yields on short-term government bills; and the day could come when the central bank would want to make loans at negative interest rates to applicants who satisfied certain requirements, such as a guaranteeing that the proceeds would go into resource-using investment; if *laissez-faire* conditions should prove to choke off deepening of capital when profits rates are still as high as 10 per cent and conventional credit operations proved not able to overcome this, the intrinsic logic of central banking requires recourse to new unconventional programs.)

Finally, I once felt it necessary to point out a minor flaw in certain descriptions of the asymmetry of monetary policy's potency. It is not correct to say that monetary policy can contract an economy more easily than it can expand it. In buoyant times when interest rates are already high and credit already tight, monetary policy is quite potent enough to *both* expand and contract the system from its previous situation; in slack times when interest rates are near the floor and the system is swimming in liquidity, monetary policy is quite impotent with respect to contraction and expansion of the system from its previous level. Thus, the true asymmetry is not that depicted by a corner in the schedule relating general activity and central bank activity, with the slope for an up movement being greatly different from the slope for a down movement; the asymmetry merely refers to the putative difference in slope at any given point in a slack as against a tight credit market.

Central Bankers abhor a situation which they feel is not closely responsive to their control. So they naturally dislike being so expansive as to create a "sloppy market." As shown above, the consequences of this abhorrance may not be too costly in the short run; yet they should often brave the displeasure of commercial bankers (who abhor sloppy markets for the good commercial reasons that such markets are hard on bank earnings) and flood the market with a view to the longer-run stimulus in investment that may come from gradual penetration of alleged liquidity-trap floors. One has no right to assume away such longer-run benefits from a policy of "over-ease." The central banker will tend to feel that the cost of such a policy will be the danger that in the subsequent recovery period the redundant credit, which had previously done no harm and precious little good, will come to life and create the possibility of an over-fast expansion and of undue inflationary pressures. This is just another aspect of his reluctance to let the money market get out of his immediate control.

While recognizing some merit in this view, I would point out that the goal of policy is not to minimize the unease of central bankers; they are supposed to suffer psychic pain when that is in a good cause. Moreover, some quickening in their contractionary actions early in the recovery may serve to undo much of the harm to be expected from an earlier policy of over-ease, and such a quickening would in many cases be a worthwhile price to pay for improving the slump situation. What I am saying here would not be so important if the only thing to fear were a regular cycle involving a recession known to be short-lived. But when an economy moves into an epoch when profit rates are sluggish (having been competed down by the plentifulness of capital stock relative to labor, and the nature and speed of contemporaneous technical change) and investment is hard to coax out at still lower profit rates, the best policy for conventional central banking operations is to keep the money market flooded with reserves, with a view to eroding gradually resistant long-term interest

rates and the profit-rate floors that businessmen insist upon getting, if they are to make resources-employing investments. Specifically, in the U. S. environment of the 1930's, it was right to have great excess reserves and minimal short-term rates: the slow, too-slow, drop in long-term interest rates was thereby encouraged. With due regard to future international payments considerations, the same strategy will be needed in certain future times; and American central bankers are wrong to reproach themselves for over-ease in the 1953-4 and 1957-8 recessions.

Zealots for monetary policy are, somewhat pardonably, infuriated by a related asymmetry that used to be argued by critics. These critics would say in one breath, "Monetary action is practically impotent," and in the next breath they would add, "But using monetary policy determinedly will plunge the system into a crisis and major depression." This argument is thought to involve almost a self-contradiction. How can a thing be simultaneously both weak and strong? Formally, this can be saved from being utter nonsense by modifying it to say, "For a small exercise of monetary policy, the results will be not only small but disappointingly small; for a really large exercise, the results will be disastrously large." To this, defenders of the view that M can take care of everything will naturally reply, "Aha then, it is really only a matter of using the right (intermediate) dosage."

On the whole, I have to agree with this defense of monetary policy, particularly in the historical context of the postwar U. S. debates as to whether letting War Bonds fall below par would entail uncontrollable disaster. But in terms of the logic of all the situations that could possibly arise, two qualifications ought to be made. (1) If the response to a control lever satisfies a function that changes suddenly from a low slope to a high one, and at an unknown spot, then a correct dosage is extremely hard to reckon or to work out experimentally; so in some, perhaps rare and unrealistic, situations the asymmetry arguments of the pessimists might have a measure of validity. (2) There is a second complication that may have been envisaged by users of this asymmetry argument; namely, the possibility that in certain situations market expectations are important, with investment demand depending on the bond prices that the central bank engineers and also on the *rate of change of prices;* given differential equation relationships of the form $F(I,P,dp/dt, M\ldots)=0$, there could result discontinuities in the solution. An example would be the case where shovelling a little snow up hill may, at an unknown and quite unpredictable point, set off an avalanche of snow. To say in such a situation, "It is only a question of the right intermediate dosage," is to miss the point.

II. *Effects of Monetary Policy on Price and Output*

It was once widely believed, and some central bank authorities still believe it, that the central bank operates to control money, or M, and that M operates directly to control the price level, P. In the old days the quantity of output, Q, was not thought to need determining by any particular agency, since something like full employment was more or less taken for granted. In more recent decades, holders of the present view have been prone to think of government *fiscal* policy as somehow having the ability to control Q, with monetary policy controlling P. The point I want to make is a purely mechanical one and has nothing to do with subjective value judgments. It is simply untrue that money and credit programs have any way of peculiarly affecting the P or price factor: successful monetary expansion will, as I have shown above, have some favorable

effect on the dollar value of total output $P \times Q$, and so will expansionary fiscal policy. The resulting change in $P \times Q$ will get distributed between expansion in Q as against expansion in P, depending upon how much or how little labor and capital remains unused to be drawn on, and upon how strong or weak are the cost-push upward pressures that come from the institutional supply conditions of organized and unorganized labor, of oligopolistic price administrators and more perfectly-competitive enterprises.

No one has been able to establish any presumption that either monetary policy or fiscal policy has some special impact upon the price as against the output factor. Indeed, one cannot too often correct the view widespread among non-economists, that a "natural" upswing in consumption or investment spending is less inflationary than an equivalent upswing in aggregate spending, $P \times Q$, brought about by deliberate public policies. (It is true that one expects a somewhat different mix of expenditures to result from new investment spending induced by credit policy than from new consumption spending induced by tax rate reduction. Likewise, a private inventory boom will encounter price rises from bottleneck pressures different from those of a private equipment boom or those of a defense boom. But there is no differential price-level presumption associated in general with deficit, credit, or private stimulation.)

I have been careful to state the Quantity Theory of Money in terms of proportionality between M and $P \times Q$, rather than in the older terms of proportionality between M and P. The first of these formulations has the advantage that it allows real output to increase considerably from an underemployment situation without there having to be much price rise up to the time that bottlenecks and resource scarcities appear. It allows also for the occurrence of "sellers' inflation", in which there may be an upward push on prices from the wage, profit, and raw material cost side. Since V and Q both tend to rise with the business cycle, Irving Fisher and older writers thought that the ratio of P to M might be approximately constant; however, the facts of the last 40 years do not accord well with such an hypothesis.

Facts aside, there is one model or case in which the older Quantity Theory would indeed be true. Imagine a new situation in which *every* price and every value magnitude has exactly doubled or halved, so that *all* price ratios and real quantities are absolutely unchanged. The essence of money—be it shells, or gold, or bits of paper (and in contrast to drinkable coffee or any good where consumption gives psychic satisfaction)—is that we want it only for its ultimate indirect utility in getting goods that can give direct utility. Basically, we want to hold money only in order to be able to spend it some day in exchange for something directly useful. Therefore, when all prices have exactly doubled or halved while all real magnitudes and exchange ratios and interest rates have stayed exactly constant, the desired amount of money holding can be thought of as exactly doubling or halving.

In this sense and situation, there is an underlying truth in a strict Quantity Theory that makes P and M exactly proportional. (Technically, economists describe this by saying that all real quantity relations are homogeneous of degree zero in *all* absolute prices and all value magnitudes like $p_i \times q_i$ are homogeneous of degree one in terms of all p's; hence the needed amount of money—the number of wampum beads or ounces of gold or items of paper currency—is a homogeneous function of degree one in all the prices when expressed in terms of that unit. Note that whenever a substance used as money also has a direct utility—as in the case of gold for

teeth or of beaver skins for coats—this strict Quantity Theory no longer applies: double the amount of beaver skins by central bank or other activity and the price of wool will not double even if the price of mousetraps should. From this formulation it will be evident that, along with the total of any useless M stuff, be it shells or metal or fiat paper money that represent non-interest-bearing I.O.U.'s of the government, we should also take account of any interest bearing I.O.U.'s of the government (which people think of as an asset but fail to think of as involving a personal liability for future taxes).

The strict Quantity Theory now says, double fiat M and fiat government bonds and you will exactly double all prices and value in a classical model that has all its real magnitudes and relative prices unchanged. These fiat bonds are important without regard to the fact that they are useable directly for exchanges or are close money substitutes. As will be seen shortly, some conventional credit operations that involve the same change in M will differ markedly in their "Pigou effects" and potency, a fact ignored by simple-minded theorists. Note too that this version of a quantity theory would hold even if the real part of the model were different from the classical one involving full employment, as in the case of some of the deep-depression Keynesian models of underemployment where so-called Pigou-effects were deemed not to operate. If the economist stipulates a real model that lacks unique equilibrium, then a change in absolute price levels might jar the system from one admissible equilibrium to another, thereby jeopardizing the "neutrality" of money.

III. *Price Changes and Distribution Effects*

Simple models do great good in clarifying issues. They can also do great harm if carelessly applied to real life in all its complexity. History does not record nicely balanced changes in all prices that are as neutral with respect to real effects as would be a dimensional transformation in which one chooses to reckon in terms of cents rather than dollars, or in terms of dozens of eggs rather than single ones. And what is more relevant, when the central bank increases one or another measure of the money supply by 10 per cent, this will not, and cannot, result in a nicely balanced change in all prices and values. It literally cannot do so because all past contracts and past prices are already determined: as a debtor your real position is altered by this new change in M, just as my position as a creditor is altered. Nor is there the slightest guarantee that what I gain you will lose, since there is no law of conservation of total well-being under such a change. Indeed, since the time of David Hume, it has been generally thought that mild *unexpected* price rises tend to expand the degree of utilization of resources and to channel resources into the hands of the more active entrepreneurial elements at the expense of more inert classes. During periods of mild or severe inflations, certain *changes in relative prices* have been considered to be characteristic.

While the conditions for a strict Quantity Theory to be valid are unrealistic, they probably become somewhat less so in the long run. I suspect that after more research has been done we shall learn that many of the systematic changes in *relative* prices induced by transitional inflations are not so great as has been believed; for, it seems odd that continuing price rises should keep coming as a surprise to people. Moreover, the longer the run, the less important will be the effects of past contracts and remembrance of lower levels of past prices. The past is, one supposes, as long as the future. But well-behaved and stable price systems tend to have the property of gradually "forgetting" the past. If that were not so, the way that the War of the Roses was

financed would be as important for 1962 behavior as the sliding-scale wage contracts of 1961. So a once-and-for-all doubling of money will eventually imply that the distortion inherent in the fact that past prices certainly have not doubled will become less and less relevant. The simpler minded Quantity Theory is thus seen to have its greatest measure of empirical validity in the longest run.

Having emphasized this kernel of truth, I must quickly add the warning that it is precisely in the long run that other things will not have remained equal: exogenous and endogenous shifts in the relations determining equilibrium will certainly have taken place, thereby vitiating any simple price-scale change as an interpretation of the empirical facts. Even if one could rule out purely exogenous disturbances, real economic life does not consist of a return to the same predetermined real equilibrium after a transient change in money supply. I live but once and, if an inflation wipes out my real net worth, that is an irreversible fact. The distribution of income and corporate power was never (including the position of Hugo Stinnes) quite the same after the 1920-23 German inflation: even if a Lorenz curve depicting the inequality of distribution of income or wealth begins to revert toward its earlier form, the class ownership of wealth could be permanently different. Even the same Lorenz curve will not imply the same people in the background and the same behavior propensities. Capitalism, as we know it today, probably would have been systematically different if Columbus had never discovered the New World with its vast areas of gold and silver. All that I have just been saying is rather hypothetical. But there can be no doubt that if Canada and the United States had followed policies which prevented the Great Depression of the 1930's, today we would have an entirely different stock of capital goods. And it is wrong to argue that this means merely that we arrive today at the state we would have otherwise reached in 1953 or 1945: to have arrived at our present "capital abundance" prior to knowing the discoveries of *recent* science would imply a qualitatively and quantitatively different pattern of economic history. (Technically, the theorist describes all this by saying that every economic equilibrium displays important *hysteresis* effects; where the very location of the equilibrium position depends upon the actual historical path of the system, and thus, there can never be truly neutral changes in the absolute price level. As a craftsman, I could wish that reality corresponded to the mechanics of a system without hysteresis, because this would make my task of analyzing economic reality so much more pleasant and simple. But just as the purpose of evolution has not been to give central bankers an easy life, neither has it been to give theorists restful nights and plenty of time to play golf or chess.

While my examples have been primarily taken from price rises, the hysteresis effects from price declines are greater still because of price and wage rigidities which persist even in the long run. The attempt after World War I to roll back the price rises by reverting to 1913 gold parities has aptly been compared to the act of running over a man and then backing up over him a second time to undo the first effects. The corpse would recognize hysteresis effects even if many of the best economists of that day did not.

All this may seem abstract, and admittedly it is expressed in technical language. Yet it does have fundamental economic implications. Simple believers in M as the determinant of total effective demand do not feel the need to distinguish between, say, an increase in M that comes from the Treasury's (or central bank's) printing new dollar bills and (1) sending them to all family heads, or (2) lending them at interest to in-

vestors, or (3) spending them on subsidies to investors, or (4) buying back Treasury bills with them. The same increase in M leads, they allege, to the same change in P × Q (and by strict "homogeneity" reasoning to the same real magnitudes). This is, of course, patent nonsense in the short run, as they concede when challenged. Under (1) consumption is presumably stimulated and interest rates, if anything, raised; under (2) interest rate falls, and presumably V too, depending upon how much investment rises. Only in the longest run, if then, can one assume that the new M gets distributed "ergodically" (i.e., independently of its original point of entry): I say, *if then*, because, at best, the stock of capital is permanently different. Note that (4) is without direct Pigou effects and hence is presumably permanently different.

Gustav Cassel's famous purchasing-power-parity theory of war-dislocated foreign exchange rates was, prior to its reformulation by Keynes and others as a mere condition of spatial price equilibrium, based originally upon precisely the homogeneity assumption I have just described. It could be precisely applied only to balanced inflation—a situation which did not exist around the time of World War I. As a matter of fact, in such an hypothetical balanced inflation resulting from a mere change in the absolute amount of an essentially neutral money, we would not get any predictive power from the purchasing-power-parity formulation, since in such a world of perfect flexibility the exchange rates would already be at their equilibrium; but to this Cassel would no doubt reply that his theory would have predictive powers in cases where there are only short-term transient departures from balanced inflation and deflation, and during such times his theory would point to the longer-run equilibrium. Eclectic defenders of the usefulness of the reasoning that underlies the strict Quantity Theory and purchasing-power-parity doctrines will gladly jettison the notion that a trillion-fold increase in 1920 German marks will result in an exactly trillion-fold change in domestic prices and foreign exchange rates: it is enough for their purpose, and mine, to stress that such massive changes in M and related magnitudes will inevitably be associated with massive changes in price levels; and that such massive changes in price levels cannot take place if the total of currency, bank deposits, and related magnitudes are kept fairly constant.

IV. *The Timing of Monetary Policy*

The effects of monetary policy are not instantaneous. This is not surprising, since there are no effects in nature that are secured instantaneously. Even when I turn my key in the lock, the fact that there are no perfectly rigid metals means that a slight twisting and delay is inevitably involved. But the intrinsic delays involved in effectuating monetary policy are much longer than this. It is widely believed that monetary policy delays are considerably less than those involved in fiscal policy actions—such as public works. And this is considered to be one of the great advantages of monetary policy. Actually, however, not a great deal is known in this area, and the empirical researches performed so far are only a beginning. (I find it interesting that Lord Cobbold of the Bank of England in his testimony to The Royal Commission on Banking and Finance of Canada referred to his experience of a six-months lag in monetary policy.) I merely want to point out that the inevitable lags both underscore the lack of perfection to be expected from monetary control and condition the procedures to be followed in making optimal decisions.

If monetary policy acted almost instantaneously and were subject to easy can-

cellations,[5] the central bank would find its task a much easier one: thus it might not have to take *anticipatory* action prior to a turn down of business activity from a full-employment level; for many purposes it would be sufficient to recognize a turn after it had already happened, which would be a procedure relatively immune from the false forecasts of turns which always plague practical forecasters. But once we recognize that lags of some considerable number of months are involved in securing the effect of new actions, there may be grave harm in a policy which tries to offset a new movement only after enough months have passed to make the direction of that movement terribly obvious. "Don't try to look over hills or beyond valleys" is the sage advice often given by those leery of our ability to forecast. This can be very bad advice, and, in fact, one has to be very arrogant concerning his understanding of the exact degree of a government's ability to forecast, in order to be able to set down this rule or any other specific rule concerning the sluggishness with which an adapting mechanism is to adjust and react to the information input available. If an airplane follows a relatively smooth path with moderate random errors superimposed on it, the electrical engineer knows he should set up a target computer which is based on considerable extrapolation of previous trajectory. If the statistical properties to be expected of the airplane are quite different—for example, involving almost completely random and unpredictable movements—the optimal servo-mechanism should be a much more sluggish one.

So, few *a priori* rules can be stipulated in advance and certainly none by those who profess to be nihilistic about man's ability to forecast at all. We must get the best guidance possible from experience itself. I'm quite sure that economic historians will feel that the Federal Reserve system was not premature in taking anticipatory action to ease the money market in the Spring of 1960, which was prior to the May turning point and which definitely involved looking over hills and not waiting to find out exactly which way the wind was blowing in order to lean against it. It is precisely the consideration that optimal stabilization policy must vary with the probability pattern of the system to be stabilized, which makes it rather ridiculous to specify in advance and for all times that some particular gadget like three-per-cent-money-increase-per-year should be adhered to, in season and out of season. Where the cold war suddenly to end, imagine the avoidable evil consequences that would follow from such a pre-determined policy.

V. *Evolution of Central Banking Goals*

Anyone who has studied carefully the evolution of Central Banking will have noted the steady broadening of its functions and goals. In the beginning, most central banks, being first among equals and merely endowed with certain special privileges and duties, were hardly distinguishable from a commercial bank. Long-run profit maximization was their proper criterion of action. Gradually the profit motive became subordinate, and today it should be of no consequence at all. (The various money creation privileges given by the government to the central bank usually have implied more than enough profits anyway; and in a modern economy the accumulated earnings beyond a nominal minimum must be thought of as reverting, eventually or continuously, to the government—and note

[5] This inability to cancel out previous action without delay is the one valid argument, which I referred to in an earlier section, for not relying upon the flooding of the money market in time of presumably short recession; note, however, the need to be able to forecast correctly the shortness of the recession.

that I did not write the Treasury, since that is merely an administrative subdivision.) Profit maximizing is at least a definite task and its disappearance makes the job of decision-making all the more ambiguous and difficult.

After central banks had been recognized as quasi-public institutions, there continued to be an evolutionary broadening of their functions and goals. And I ought to say that these purely factual trends are regarded by most economic experts as desirable developments. The same cannot always be said about the attitude of bankers. And even central bankers are not to be regarded as reliable authorities on the proper role of the modern central bank. Governor Strong of the New York Federal Reserve Bank and Montagu Norman of the Bank of England agreed on many things; from beyond the grave they undoubtedly would disapprove of most changes in central banking which are not even matters of controversy today. If Canada appoints another Royal Commission to look into this matter 25 years from now, the witnesses before it will take for granted many changes that would shock the present generation of central bankers. I suspect that the direction of many such changes can be fairly confidently predicted today. I should add that these developments impress me as being, for the most part, salutary moves in the battle to improve the performance of non-totalitarian mixed-enterprise systems.

►WESLEY LINDOW

Bank Capital and Risk Assets

One of the subjects most likely to engage the attention of bankers during the next ten years is the amount of bank capital that will be needed to support the expansion of bank credit in a growing economy and the twin question of how such capital should be provided. This paper will examine the postwar trends in bank capital ratios against the background of broader historical movements, review the evolution of standards by which capital adequacy has been judged, and discuss the prospects for bank credit expansion and growth in bank capital over the next ten years. The discussion will then turn to the ways in which bank capital can be increased. The advantages of retained earnings (including the use of stock dividends) will be examined, and the relative merits of raising outside capital through common stock, preferred stock, or capital notes and debentures will be analyzed from the standpoint of the bank's common shareholders.

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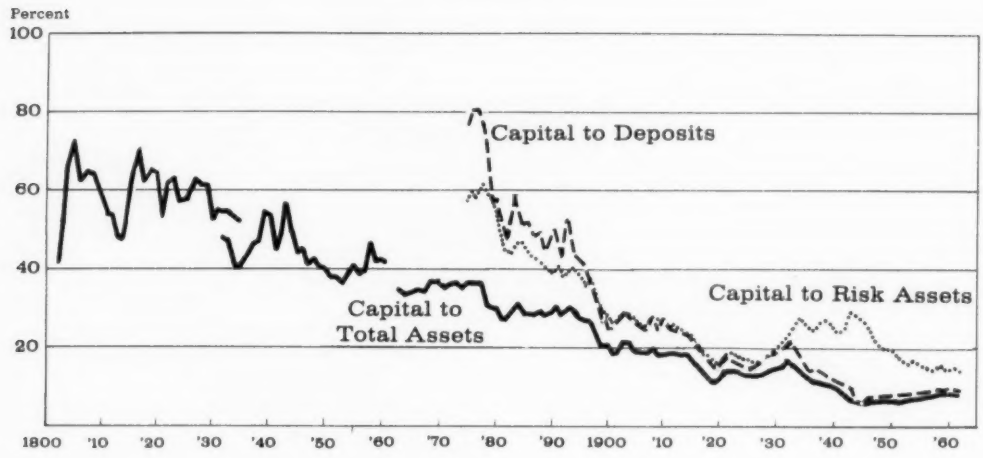
I. *Historical Trends in Bank Capital Ratios*

As a starting point, it is useful to examine recent trends in the growth of bank capital against the perspective of historical developments. But bank capital cannot be evaluated as an isolated statistic; it must be viewed in relation to other elements of the balance sheet, since the function of bank capital is to protect depositors against loss by serving as a buffer between deposits and the risks inherent in the banking business. The traditional methods of analysis have been to consider bank capital as a ratio to deposits, to total assets, or to risk assets. While each of these measures has obvious

Chart 1

Bank Capital as a Percent of Assets and Deposits 1803–1963



Sources:

Derived from data (as of June 30):

1803–1835 for Massachusetts banks—*1876 Report of the Comptroller of the Currency*, p. 98.

1834–1862 for all banks in the United States—*Historical Statistics of the United States, 1949*, p. 263.

1865–1962 for all commercial banks in the United States—*Annual Reports of the Comptroller of the Currency, 1865–1874*; *Journal of Political Economy*, December 1947, p. 559; *Historical Statistics of the United States*, 1957, pp. 631–2; *Banking and Monetary Statistics*, Board of Governors of Federal Reserve System, *1962 Supplement*, p. 28; *Federal Reserve Bulletin*, March 1962, p. 346.

shortcomings, as will be discussed below, these ratios are helpful in showing broad trends that have taken place.

Chart 1 shows that basic capital ratios have been coming down for a century and a half. Early in the 1800's, the ratio of capital to total assets ranged around 60% and drifted down steadily thereafter. By the early 1900's this ratio had fallen to about 20% and the rapid expansion of bank assets during World War I and the 1920's pulled it down below 13%. This downward trend was temporarily reversed by the cataclysmic events of the Depression years, but subsequent expansion of bank assets in the late 1930's and the war years brought the capital-to-total assets ratio down to a low of 6% in 1945. Some improvement has occurred since then, but the ratio has stayed below 10% for the past 20 years.

The ratio of capital to deposits has followed a closely parallel trend, as the chart shows, running somewhat above the ratio of capital to total assets. The average capital-deposit ratio for the commercial banking system had been as high as 80% in the 1870's, but dropped to about 25% by the early 1900's. By 1945, this ratio had slipped to just over 6%; the gradual rise over the postwar period has brought the capital-deposits ratio up close to the 10% level, but the present percentage is still lower than at any time before World War II.

The ratio of capital to risk assets[1] had

[1] In these calculations, risk assets are defined as total assets less cash and United States Government securities. Although this is obviously an imperfect measure of risk, it is used here to show rough orders of magnitude.

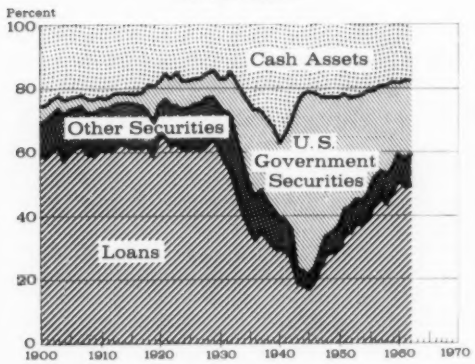
run close to 60% in the late 1870's, but declined to about 25% after the turn of the century. Rapid loan expansion, beginning with World War I and continuing through the 1920's, brought the capital-risk asset ratio down to a range of 15-18%. The contraction of loans during the 1930's pushed this ratio back up to 27%, but the postwar growth in loans has pulled it down below the low points touched during the 1920's. By mid-1963, the ratio of capital to risk assets had fallen to an all-time low of 14%.

Another approach to these same trends is shown in Chart 2, which presents the percentage distribution of commercial bank assets since 1900. In the years following World War II, loans and other securities expanded rapidly, not only in absolute size but as a percentage of bank assets, as shown by the two lower areas of Chart 2. The counterpart of these trends has been rising loan-deposit ratios and declining liquidity ratios of commercial banks.

Chart 2

Percentage Distribution of Assets

All Commercial Banks
1900–1962



Sources:

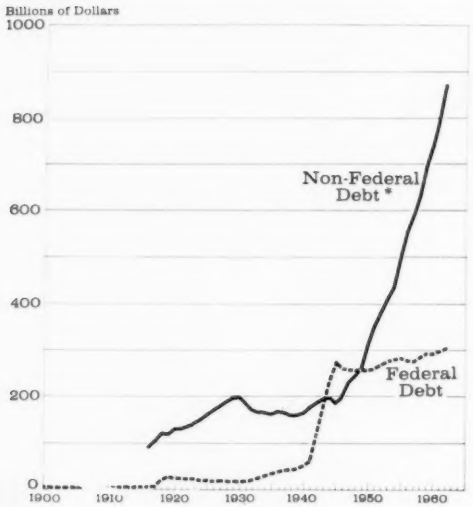
Derived from data (as of June 30):
Historical Statistics of the United States, 1957, p. 631; *Banking and Monetary Statistics*, Board of Governors of Federal Reserve System, *1962 Supplement*, p. 28; *Federal Reserve Bulletin*, March 1963, p. 346.

The share of bank assets represented by cash has dwindled gradually in recent years; this is largely a return to normal following the unusual years of depression and world war. It will be remembered that reserve requirements were sharply raised in the mid-1930's to counteract the huge gold inflow and kept high after World War II to restrain inflationary developments; over the past several years reserve requirements have been brought down part way to the historic levels prior to the Depression. In addition, the shift in the deposit structure toward a higher proportion of time deposits with lower reserve requirements has meant a lower percentage of bank assets held in the form of balances at the Federal Reserve.

Holdings of U.S. Governments built up during World War II gave way rapidly to the advance of loan totals during the postwar years. One motivation behind this redistribution of assets was the natural tendency to shift from low-yielding Government securities to higher-yielding commercial loans and tax-exempt securities. But in economic terms, the most important element of this shift was the fact that the Federal debt was first reduced in the early postwar period and then grew far less rapidly than the debt of other sectors of the economy—business firms, consumers, and state and local government units. As may be seen in Chart 3, the expansion of debt *other* than Federal debt has been quite steep during the past 15 years; the banking system has, of course, been an active agent in the extension of such credit. Furthermore, the Treasury has deliberately sought to reduce the share of the Federal debt held by commercial banks by offering, during the past ten years, long-term Treasury securities outside the normal "bank range" of maturities. Even if the commercial banking system acquires a proportionate share of the Federal and non-Federal debt likely to be issued during the next decade, the implications are for

Chart 3

Growth of Debt
1900–1962



Sources:

Federal Debt (U.S. Government Gross Debt, Public and Guaranteed)

1900–1928: *Historical Statistics of the United States, 1957,* p. 711. June data.

1929 to date: *Economic Report of the President—1956,* p. 219, and—*1963,* p. 236. December 31 data.

Non Federal Debt (Total Public and Private Debt less Federal Debt)

Total Public and Private Debt, Survey of Current Business, Dept. of Commerce, July 1960, p. 35, and May 1963, p. 16. December 31 data.

a further shrinkage in the proportion of total assets represented by non-risk Government securities, and a continued rise in the proportion of risk assets.

II. *Changing Standards of Capital Adequacy*

Accompanying the downward drift of bank capital ratios has been a steady evolutionary change in attitudes of bankers and supervisory officials alike as to the amount of capital needed for safe and efficient banking. A century ago, the first Comptroller of the Currency, Hugh McCulloch, found that one of the great problems he faced in guiding the establishment of the national banking system was to restrain "a dangerous increase of its banking capital." In his Annual Report of 1864, the Comptroller discussed at length the hazards of inaugurating a new system of banking and stated: ". . . I have been, from the time of my appointment, more apprehensive that too many banks would be organized, than that the system would not be sufficiently attractive to induce capitalists to become connected with it." He went on to report: ". . . I have felt it to be my duty to discourage, in many instances, the organization of new banks, and in more instances to refuse my sanction to the increase of the capital of those already organized."

These words must seem strange indeed to bankers who read them in 1963. But the circumstances 100 years ago differed vastly from the present day: specie payment had been suspended during the Civil War and, with a flourishing demand for paper money, national banks stood to profit from the issuance of the new national bank notes. The 50 years after the Civil War witnessed a transition from note to deposit banking, and the deposit liabilities of the banking system rose seven times as fast as note circulation. By 1914, the Comptroller of the Currency was expressing this view:

> The view is held by many practical bankers and experienced economists that it is not sound banking for an active commercial bank to be allowed to receive deposits in excess of ten times its capital and surplus. I am firmly impressed by the correctness of this view . . . A commercial bank whose capital and surplus amount to less than one-tenth of its deposits is, except possibly under very exceptional conditions, doing business on too small a capital and upon too narrow a margin for safety, and does not furnish its creditors the protection to which they are entitled against unexpected losses and con-

tingencies which are liable to, and do, so frequently arise.[2]

This widely shared attitude persisted for a full generation; in fact, a good many states included a minimum 1-to-10 requirement for capital to deposits in their banking statutes. But the late 1930's brought overwhelming changes in the structure of bank assets and liabilities and the capital-deposit standard was eroded widely as many banks fell below the 1-to-10 ratio. By 1939, the Federal Deposit Insurance Corporation had begun to urge the use of the ratio of capital to total assets as the appropriate test of bank capital adequacy.

During the Second World War, when banks were pressed by the Treasury to take on huge quantities of U.S. Government securities and thereby expanded their assets enormously, the question of capital adequacy in relation to total assets was laid aside by the Federal supervisory agencies. As banks emerged from the war with inflated holdings of Government obligations, riskless from a credit point of view, the focus on capital adequacy was shifted to the amount of capital in relation to "risk assets"; i.e., assets other than cash and holdings of U.S. Government securities. By 1948, it became clear that the Comptroller of the Currency had abandoned the capital-deposit ratio and was placing emphasis on the ratio of capital to risk assets as a screening device. The 1948 *Report* stated:

> The rapidly changing character of bank assets, adverted to in this and previous reports, is such that the ratio of capital to deposits is not a reliable measure of the magnitude of the *risk* element in the banks' activities, and it is the function of the capital structure to protect the bank and its depositors from that element of risk . . . .

During the ensuing years, lively debate over the appropriate standards for capital adequacy has continued, and the risk-asset ratio has come under increasing fire. A common criticism has been the fact that the so-called "risk assets" include a wide spectrum of loans and investments on which the exposure shades all the way from a considerable loss potential to virtually no risk. Direct or indirect guarantees by the Federal Government on such assets as FHA and VA mortgages, Federal agency issues, Public Housing Authority bonds and Export-Import Bank loan participations should put these assets into a different class than the traditional 90-day commercial loan, even though their maturities are typically longer. By the same token, an Aaa-rated municipal obligation is not as risky as a 7-year term loan to a small manufacturing corporation. To take some account of these differences, the use of a modified or adjusted risk-asset ratio was urged by banking groups in 1952,[3] and the supervisory authorities have moved increasingly in this direction in recent years.

In 1954 the American Bankers Association issued a statement of principles regarding capital adequacy which carefully avoided the use of mechanical yardsticks, urging instead that "it is far more important and essential to evaluate the specific elements of weakness and strength to determine what burden the capital funds of the bank might be expected to bear."[4] The Federal Reserve Board has devised a measure of capital adequacy which divides bank assets into several categories according to the degree of risk and requires varying percentages

[2] *Annual Report of the Comptroller of the Currency*, 1914 (Vol. 1), p. 21.

[3] See, for example, New York State Bankers Association, *A Report of the Committee on Risk Asset Ratio Study*, March 1952; Gaylord A. Freeman, Jr., *The Problems of Adequate Bank Capital*, an analysis prepared for the Illinois Bankers Association, May 23, 1952.

[4] American Bankers Association, *The Adequacy of a Bank's Capital Funds* (New York, October 1954).

of capital to support the risk in each category.[5]

There is a natural aversion among bankers to the use of rigid or mathematical formulae by supervisory authorities. The Report of the Advisory Committee on Banking to the Comptroller of the Currency in September 1962 argued that "it is doubtful that the arbitrary formula which has been followed in the past provides a sufficient basis for determining the proper capital position of National Banks," and went on to suggest that other factors to be considered should include quality of management, character of the bank's assets, earnings record, quality and character of ownership, fixed assets in relation to occupancy expenses, volatility of deposits, internal operating and audit procedures, and the economic characteristics of the bank's trade area. Yet, the recommendation of the Committee was that while "salient individual qualitative factors should properly be considered in appraising capital adequacy, [the Committee] does not favor the complete abandonment of a formula test."[6] Last December the Comptroller indicated his accord with the recommendations of the Advisory Committee by announcing that his analyses of capital adequacy would proceed along the lines urged by the Committee.

The pronounced changes in standards of capital adequacy over the past half century reflect not only the massive shifts that have occurred in the structure of bank assets, but also the changes in the economic and financial environment in which banks operate. As noted above, many of the so-called risk assets held by commercial banks today carry direct or indirect guarantees of the Federal Government, and the proportion of such holdings has increased greatly over time. This simple fact blunts the validity of historical comparisons of bank capital in relation to risk assets (as shown in Chart 1), although such data are useful in showing broad trends. In addition, the definition of capital used in such ratios often fails to include the bad debt and valuation reserves or the general reserves of a bank, although these are obviously vital elements in the ability to absorb losses and protect depositors.

The ratio of capital to deposits has fallen into disuse on the grounds that the function of capital is to absorb losses which are likely to arise not from the liability side of the balance sheet but from the asset side. It must be recognized, however, that a sudden deposit drain which forces liquidation of assets could produce losses that capital must be prepared to absorb; hence, the composition and volatility of deposits does have a bearing on the needs for bank capital. In this context, the more rapid growth in savings deposits during the postwar period (and especially the past 2½ years) would seem to require less capital than if the growth had taken place in demand deposits alone. The existence of the Federal Deposit Insurance Corporation provides a stabilizing element that was not present before 1934; by preserving public confidence in the safety of bank deposits, the FDIC helps to forestall wholesale deposit withdrawals that could force losses upon individual banks.

The broad economic environment in which banks operate today is also affected by the stabilizing influence of monetary and fiscal policy, not to mention the many governmental actions designed to restrain inflation, offset recession, or curb speculative excesses. In light of these environmental differences, it may be argued, the relative amount of capital that is neces-

[5] For a discussion of this method and a comparison with other techniques used to measure capital adequacy, see Howard D. Crosse, *Management Policies For Commercial Banks* (Prentice-Hall, 1962), Chapter IX.

[6] *National Banks and the Future:* Report of the Advisory Committee on Banking to the Comptroller of the Currency (Washington, D.C. 1962), p. 68.

sary for the safe and efficient operation of the banking system today is far less than it was in the 1920's or earlier.

III. *The Prospects for Bank Capital*

While bankers have been quite aware of the vast structural changes that have characterized the postwar period, these have sometimes been interpreted as an adjustment from the unusual credit conditions and abnormal structure of bank assets that developed during World War II. What may not be so widely appreciated is the fact that the developments we have witnessed in more recent years are no longer part of the postwar adjustment process. These developments are more likely to appear in retrospect as the opening years of a separate period of economic history, divorced from the direct influences of the war years.

Much is being said these days about the slowdown in the growth of the United States economy. But the very fact of such discussion, in private circles and official quarters, may bring action which will ultimately speed our growth rate. In the latter part of the 1960's, demographic forces, and particularly the age-group composition of the population, indicate strong natural pressures toward more rapid expansion. According to Census Bureau projections, the population in the 20-29 age group will exceed 30 million by 1970, a dramatic 40% increase in only one decade. The bumper crop of postwar babies is growing up and will soon become wage earners; as they marry and start families of their own, they will greatly enlarge demands for automobiles, housing and household appliances, and for credit needed to finance these items. For bankers, future expansion is most likely to take the form of greater demands for credit which will fall in the risk-asset category. The question that needs to be brought to the foreground is how much bank capital will be required over the next decade and how it should be provided.

As shown in Chart 4, plotted on a ratio scale to show proportionate changes, the postwar growth of risk assets has been much faster than either the growth of total assets or the growth of bank capital. During the period 1947 to 1962, risk assets grew at an average annual rate of 9%, compared with a 6% rate of growth for bank capital; these averages are shown as dashed trend lines in Chart 4.

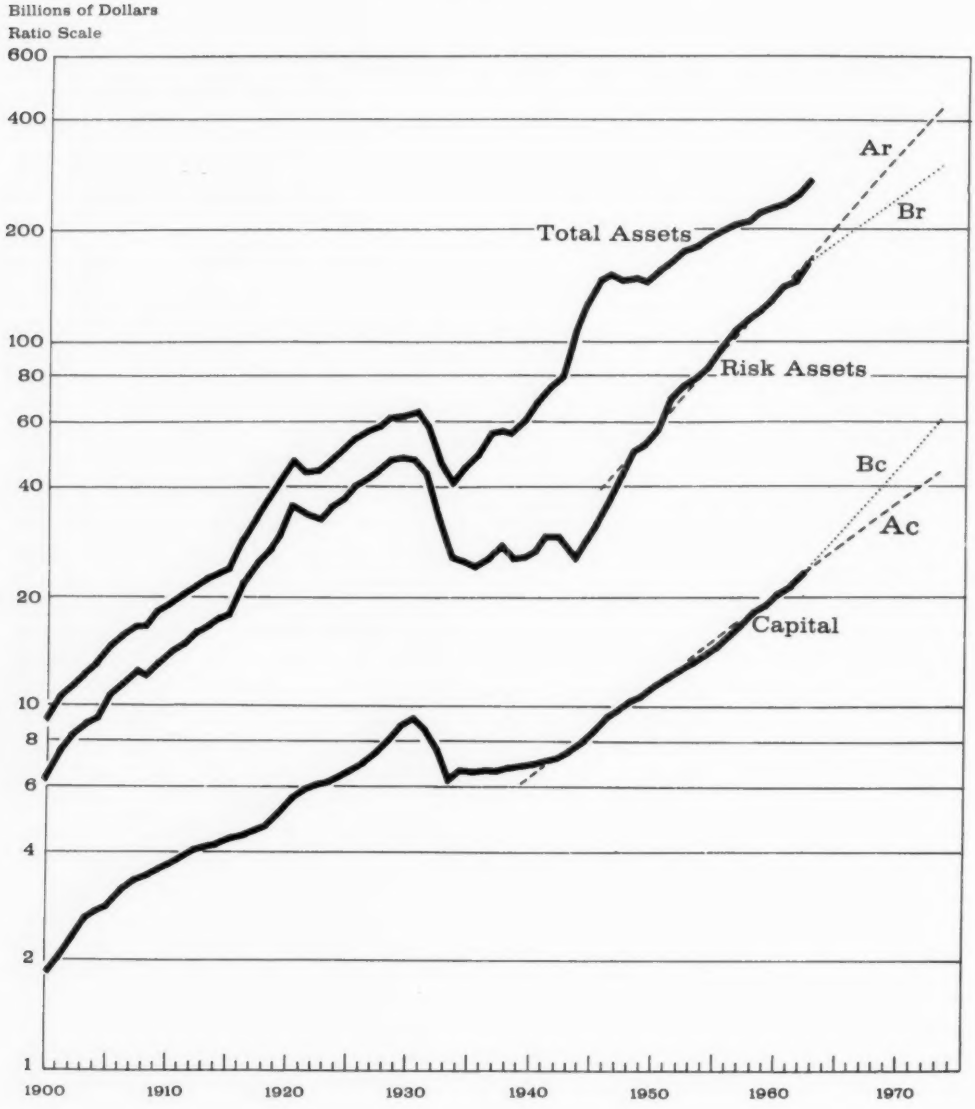
Just what can be expected to take place over the next ten years? It is sometimes dangerous to predict that recent trends will continue without interruption into the future. For the sake of illustration, however, assume that risk assets continue to grow for the next 10 years at the same 9% average rate that we have seen in the past 15 years (Projection A_R). This would bring risk assets to almost $430 billion, or more than twice the current level. And if bank capital increased at the postwar 6% annual rate, the total would reach $43 billion by 1973 (Projection A_C). The result would be a risk-asset ratio of 10%, compared with the present all-time low of 14%.

In order for risk assets to continue their recent rate of growth *without* a slippage in the ratio of capital to risk assets, the total amount of bank capital would have to rise to $61 billion by 1973. This would require a stepping up in the growth rate for bank capital from the 6% postwar average to an average annual increase of 9%. This second possibility is illustrated by the dottel line of Projection B_C in Chart 4.

A third possibility would be for bank capital to continue to grow through 1973 at its postwar 6% rate (Projection A_C), but to slow down the growth of risk assets in order to prevent the risk-asset ratio from falling below the present 14%. This would require a decline in the risk-asset growth rate to 6%, plotted as a dotted line in Chart 4 as Projection B_R.

Chart 4

Bank Capital and Assets—All Commercial Banks
1900–1962



Sources:

Derived from Data in *Historical Statistics—1957*, pp. 631-2; *Banking and Monetary Statistics*, Board of Governors of Federal Reserve System, *1962 Supplement*, p. 28; *Federal Reserve Bulletin*, March 1963; p. 346. June 30 data.

Risk Assets represent Total Assets other than Cash and U.S. Governments.

These examples are hypothetical and not offered as predictions of the future. But they do point up the alternative possibilities that we seem to face in the banking community: (1) permit a further decline in capital-risk asset ratios; (2) speed up the rate of bank capital accumulation; or (3) slow down the growth in loans and other assets. The practical outcome probably will be that some combination of "1" and "2" will occur, but bankers should be aware, as managers of individual institutions and as part of the banking community, of the problems posed by each of these possibilities when taken alone.

The first possibility, as mentioned above, is to allow capital-risk asset ratios to continue their decline. But how far and how long? While there may be no mathematical formulae that are generally acceptable as measuring capital adequacy for a particular bank or for the total banking system, there must be some point at which the prudence of management, if not the intervention of banking authorities, will suggest that more capital is needed generally among banks if asset expansion is to continue apace with the growth of our economy. Perhaps as we approach a 10% capital to risk assets ratio, resistance to further decline may become quite firm.

The second possibility is to increase bank capital more vigorously in order to lay the foundation for meeting the rising credit needs that are to be expected in an expanding economy. This calls for long-term studies of bank growth and better planning to meet capital needs through sure and steady efforts rather than occasional crash programs. To prepare themselves for changes that may occur in risk assets and capital over the next ten years, bankers should find it worthwhile to work up projections for their own institutions as a type of "road map" to planning for capital needs.

The third possibility is deliberately to curb the expansion of risk assets in order to keep capital in line with whatever standards of adequacy are used. In other words, build bank capital at about the same pace as in recent years, but hold back the growth of risk assets in order to keep the ratios close to current levels. This is certainly the least acceptable solution, since it implies that the role of banks as credit suppliers would be sharply curtailed. There can be little doubt that any inability of banks to fulfill their function as sources of business credit would lead to expansion of existing nonbank institutions in this direction, and perhaps even to the development of new institutions to fill the void. Abdication of the banking function would be inconsistent with the responsibilities of bankers to the business community and to their own institutions.

If the decision is reached to increase bank capital more aggressively, what avenues are open to the commercial banker and what are the advantages and disadvantages of each? Can retained earnings be expanded further to avoid the need for outside financing? Are there new approaches to raising capital that have been overlooked or deserve further exploration by the banking community? Before turning to these intriguing questions, the actual performance of banks in increasing their capital in the postwar years is deserving of study.

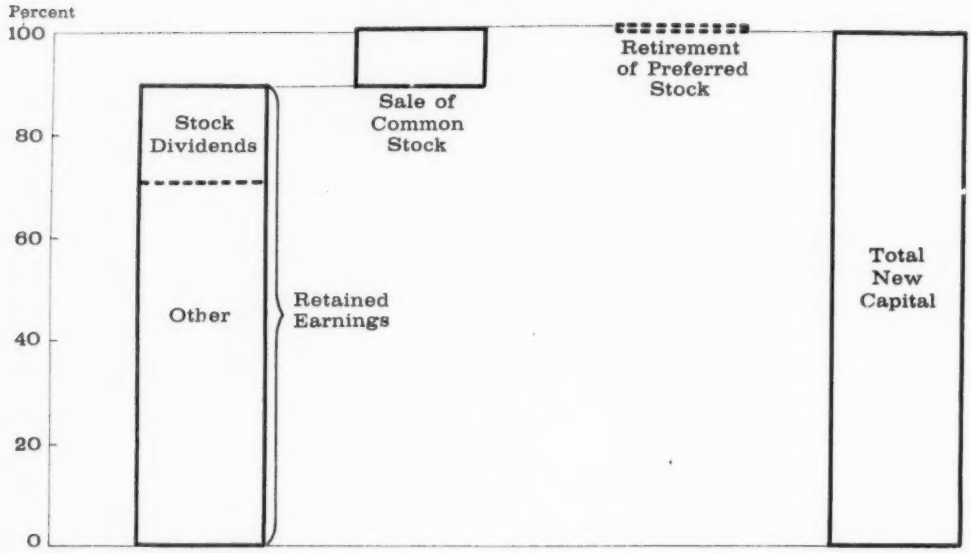
IV. *Retained Earnings vs. Outside Financing*

By far the most important source of bank capital has been the time-honored method of retaining earnings, as may be seen in Chart 5, which is based on data for all national banks. In the period 1945 through 1961, national banks obtained about 89% of their new capital from retained earnings and about one fifth of this took the form of stock dividends. In comparison, sales of new common stock accounted for only 11% of new capital

Chart 5

Major Sources of Bank Capital—All National Banks

1945–1961



Sources:
Derived from data in *Annual Reports of the Comptroller of the currency, 1945–1961.*

during the postwar period. While some banks have raised capital through preferred stock issues, these were more than offset by other banks retiring preferred stock issued during the Depression. Thus, preferred stock has been on balance a negative source of capital over the 1945-61 period, and is shown in the chart as a deduction from the amount provided by retained earnings and common stock sales.

Building bank capital through retained earnings has a number of advantages to the stockholders of a bank. First, they are able to avoid the dilution of earnings that would usually occur if capital were raised by selling new stock at least in part to outsiders. Second, retention of earnings to increase capital has the advantage of avoiding the costs of flotation and the market uncertainties that are encountered when securities are sold. Finally, retained earnings enable present stockholders to build their investment in a bank without a further siphoning off of earnings by the tax collector. The main drawback of retained earnings, of course, is the fact that cash dividends are kept low and those stockholders looking for better current return may grow dissatisfied.

The ability to accumulate capital through retained earnings depends not only on the level of operating income less expenses but also on the amount of income taxes that must be paid. While a discussion of the many factors that determine bank earnings is outside the scope of this paper, it may be noted that a reduction in the rate structure of Federal income taxes, currently under consideration by the Congress, would augment the

ability of banks to increase capital through retained earnings in the years ahead. It is difficult to say exactly what portion of a given tax cut would end up in retained earnings for the average bank, but it should be clear that lower taxes would aid the process of bank capital accumulation.

One method by which banks have increased their retained earnings while also supplementing cash dividends has been the use of small annual stock dividends.[7] Stockholders who want to maintain their investment in a bank hold the stock dividend and pay no tax on the transaction; those who prefer cash are able to sell the stock dividend and receive favorable capital gains tax treatment. As an alternative to new stock issues, this method avoids the disadvantages involved in paying out cash dividends and then asking stockholders to buy new stock with their after-tax dollars. This is useful only in a true growth situation as it must be clearly evident that earnings growth will support the compounding effect of successive stock dividends. Some observers point out that the paper work is cumbersome and costly, but stock dividends seem to work well and will probably be effective as long as Federal taxes are a major factor in our economic life. Stock dividends may also be issued irregularly in larger fractions in order to build retained earnings.

According to a study by the American Bankers Association, based on the 1957 experience with sales of bank stock, stock dividends are also used by many banks to pave the way for the sale of new common stock. The study further noted that stock dividends also reduce very high book values by increasing the number of shares and "thus tend to bring share prices within the means of small investors."[8]

The explanation for the relatively modest sales of common stock by commercial banks is not hard to find. In the first place, banks have earned less on their capital accounts over the past ten years than the manufacturing corporations with which they must compete for investor funds (see the top panel of Chart 6). In the attempt to accumulate capital through retention of earnings, bank dividend policies have been conservative, which may itself have secondary repercussions on the ability to attract new capital through the sale of common stock. As the center panel of Chart 6 shows, the payout of dividends by insured commercial banks has risen somewhat from about 3½% of capital accounts in 1953 to just over 4% currently. But this level still compares unfavorably with the dividend rate of manufacturing corporations, which has averaged about 5% of equity during the past few years. Moreover, the postwar advance in stock prices has favored industrial stocks over bank stocks, as may be seen in the lower panel of Chart 6, reflecting investor preference for the higher level of earnings and more apparent growth potential of manufacturing corporations.

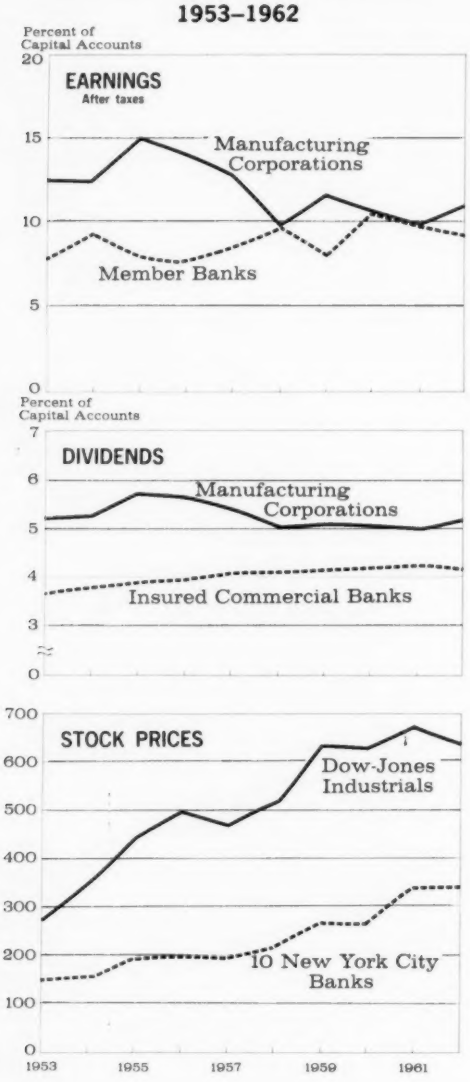
The amount of bank capital raised through the sale of preferred stock or the issuance of capital debentures has been negligible in the postwar period. The latter form of capital financing had its greatest use during the 1930's, when banks sold debentures to the Reconstruction Finance Corporation, and has been associated, perhaps unfairly, with distress situations on the part of the issuing banks. The stigma attached to preferred stock and debenture financing was touched upon in last year's report of the Advisory

[7] For a fuller description of this practice and its advantages, see "The Case for the Small But Frequent Stock Dividend," *Bank News*, February 15, 1963, p. 13.

[8] George Hanc, "Building Bank Capital Through the Sale of Common Stock," *Banking*, September 1958.

Chart 6

Earnings, Dividends and Stock Prices
Banks vs. Manufacturing Corporations
1953–1962



Sources:

Manufacturing Corporations: *Quarterly Financial Reports,* Federal Trade Commission—Securities and Exchange Commission; Insured Commercial Banks: *Annual Reports of the Federal Deposit Insurance Corporation;* Dow-Jones Industrial Stock Prices: mean of annual highs and lows; Annual averages of 10 N.Y. City Bank Stocks (1941–43=100): Standard and Poor's Corporation.

Committee on Banking to the Comptroller of the Currency, which stated:

> The practice has been to confine the issuance of preferred stock by National Banks to emergency situations. As a consequence, a widespread view has developed that the use of such stock by banks reflects a condition of financial difficulty. This view should be dispelled.
>
> The use of preferred stock enables business firms to provide additional capital without diluting the equity position of the common shareholders. The use of debentures accomplishes the same result and has the additional advantage that interest costs are deductible for income tax purpases. There is no sound reason why National Banks should be deprived of any legitimate capital-raising method ,that is available to corporations generally.[9]

New regulations issued by the Comptroller last December clarified the point that national banks may issue preferred stock "in accordance with normal business considerations" and also sell convertible or nonconvertible capital debentures on the same basis, as long as statutory limitations on over-all borrowing are not exceeded.

State-chartered banks in many states may also issue preferred stock or debentures, subject to limitations which vary from state to state. On the other hand, state laws sometimes also reveal a basic prejudice against bank issuance of preferred stock through the legal limitations placed on investors; for example, mutual savings banks in Massachusetts may and do hold common stocks of commercial banks, but such investments are barred with respect to commercial banks with preferred stock outstanding.

The logic behind using preferred stock and debentures has also received the support of the academic community. Professor Charles M. Williams of Harvard,

[9] *National Banks and the Future, op. cit.*, p. 82.

in a recent address before the Savings Division of the American Bankers Association, stated the case in these terms:

I have become impressed with the cost advantages of moderate use of subordinated-debt issues over added issues of common stock. To a lesser extent, preferred stock is also a relatively low-cost source of capital compared to common stock. The Comptroller has indicated his willingness to regard subordinated debt and preferred stock as acceptable, normal instruments for raising capital for national banks. Similar freedom for state banks to raise capital in this form, for which only supervisory policy changes would be necessary in most states, would, in my view, be desirable. Wider bank use of these lower-cost sources for additional capital needs would somewhat cut into the cost-free capital advantages of the mutuals, while still leaving the banks with the advantages that go with stockholder ownership.

Professor Williams elaborated on these views in an article in the *Harvard Business Review* for July-August 1963.

In September, 1962, considerable interest was stirred in the banking community by the issuance of $20 million of 4.60% cumulative preferred stock, of $100 par value, by Franklin National Bank of Long Island. This offering enabled the bank to increase its total capital, surplus and undivided profits (including loss reserves) to more than $98.5 million. The preferred stock is non-callable for 10 years, and a purchase fund of $700,000 per year will be set aside out of earnings to buy in stock, if it is selling below par.

It may well be that the change in official attitudes toward preferred stock issuance and the example set by actual offerings of preferreds will re-awaken the interest of banks in this technique for expanding bank capital.

One other device for improving capital ratios in a more subtle manner should be mentioned; namely, the freeing-up of capital tied up in real estate assets. Many formulas attempting to measure capital adequacy treat real estate as frozen capital, so real estate is deducted to arrive at "free" capital available to absorb losses in other assets. Quite a few banks in recent years have found it desirable to finance the acquisition of new premises by setting up a real estate subsidiary which in turn borrows from long-term investors. This permits operating control of the property to stay in the hands of the bank, but permits borrowing which does not enter the bank's own balance sheet. A wide variety of such financing arrangements has been employed by banks in recent years, with favorable effects on both the balance sheet and the earnings statement.

V. *Selling Securities to Raise New Capital*

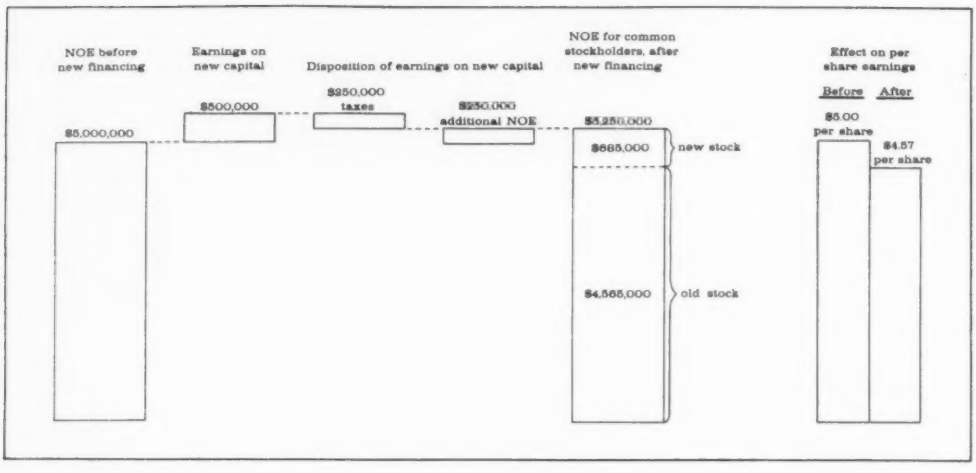
The foregoing discussion has touched upon some of the issues surrounding the three alternative methods by which a bank may raise additional capital through outside security sales—namely, common stock, preferred stock, and capital notes. If a bank is to embark upon any of these three routes, it should be conversant with the financial effects that each method will have on its own tax position, on the tax position of investors, on bank earnings available to common shareholders, on earnings per share, and on book value of its common stock.

To compare these three alternatives, the following illustrations have been developed in order to bring out the advantages and disadvantages of each. Some of the arithmetic used is deliberately oversimplified, in order to show the comparisons more clearly. It is believed that any variations or refinements of these illustrations would not materially change the basic conclusions that result.

In this hypothetical case, assume that a bank now has 1,000,000 shares of outstanding capital stock with a book value of $50 per share, or $50,000,000. Total

Chart 7

Alternative A—Sale of $10 Million Common Stock



net operating earnings are $10,000,000 before tax, and $5,000,000 after tax (a 50% income tax rate is assumed throughout for simplicity). With 1,000,000 common shares outstanding, after-tax earnings are $5 per share. The current market value of these shares is $75, representing a price-earnings ratio of 15. It is further assumed that the bank will be able to earn a 5% return before taxes on any additional capital raised; any costs of flotation for new capital are ignored. The bank in question has decided to raise $10,000,000 in new capital and is weighing the choice of (a) issuing common stock, (b) issuing preferred stock, or (c) issuing capital notes (non-convertible).

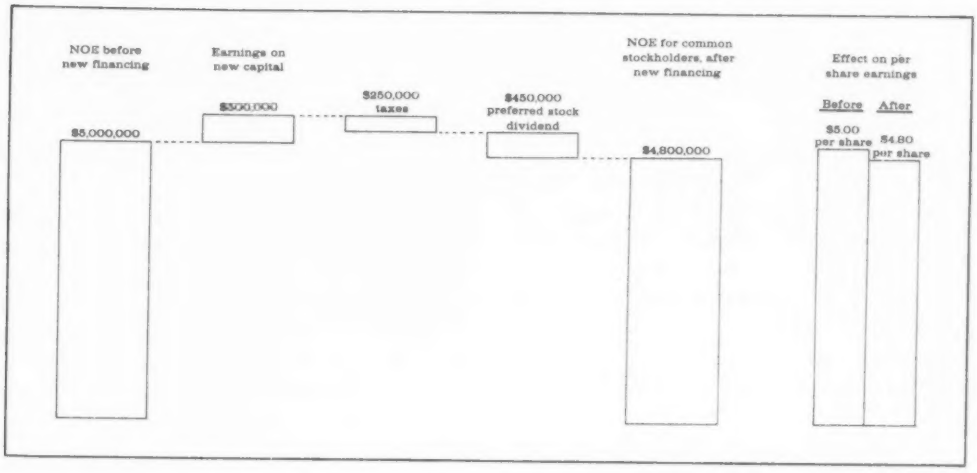
Alternate A: Sale of Common Stock

The first question in a flotation of additional common stock is the price. With market value at $75 and book value at $50, the bank in this example decides to sell an additional 150,000 shares at $66.67 to raise the desired $10,000,000.

The effects of issuing 150,000 additional shares of common stock are traced through in Chart 7. At the assumed 5% earnings rate, the $10,000,000 in new capital produces $500,000 in additional earnings; taxes take $250,000 of this amount, leaving $250,000 to be added to net operating earnings (NOE), and bringing total NOE after the new financing to $5,250,000. However, total NOE after financing must now be divided among the enlarged number of outstanding common shares, which has risen from 1,000,000 to 1,150,000. The result is a dilution of earnings for the original holders of common stock; as shown in the right-hand column of Chart 7, earnings per share will decline from $5 to $4.57. The inevitability of dilution may be seen another way: the new capital from the sale of common stock has increased after-tax earnings by $250,000 or 5%, while the number of shares has been increased by 150,000 or 15%. Also, after-tax earnings on book value were 10% before the financing, while earnings on the new funds raised are only 2½% after taxes. It should be noted that the sale of common stock at a price above book value has raised the book value from $50 to $52.17 in this example.

Chart 8

Alternative B—Sale of $10 Million Preferred Stock (4½%)



Although the original shareholders may suffer a *relative* loss through the dilution resulting from sale of common stock, they need not suffer an absolute loss. There should be a "rights value" for existing stockholders if the new shares are offered for their privileged subscription. The amount of the "rights value" is difficult to determine, since it depends upon the market price adjustment to the new stock offered, and also upon the degree to which stockholders discount future earnings growth stemming from the new capital.

Moreover, this example shows only the immediate effects and does not take account of the leverage which new capital can exert on earnings assets. The stronger capital position may attract additional depositors and also enable the bank to take advantage of future growth opportunities that would have been inhibited by a lack of new capital. Higher capital also means larger loan limits which may help to attract business to the bank. Accordingly, the addition of $10,000,000 in capital may, over a period of years, enable the bank to increase earning assets by more than the amount of the new capital; hence, earnings per share may *rise* from the original $5 level, rather than decline as shown in Chart 7.

These secondary effects on the bank's potential growth in earning assets may result, regardless of the form in which capital is raised; thus, these possibilities do not upset the validity of the comparisons shown here of the effects on per-share earnings resulting from the three alternative methods.

Alternative B: Sale of Preferred Stock

Chart 8 illustrates the financial effects of issuing preferred stock with an assumed 4½% dividend. As in the case of common stock, earnings on the additional $10,000,000 of capital will be $500,000, of which taxes will take half, leaving $250,000. However, the required dividend on the preferred stock will be $450,000 (not deductible), which means that the net operating earnings brought down to common will be reduced $200,000 from the pre-financing level of $5,000,000. With net operating earnings of $4,800,-

000 after the new financing, common stockholders will find that their per-share earnings have declined from $5 per share to $4.80 per share, as shown in the right-hand column of Chart 8. Book value is left unchanged at $50 since the common stockholders' equity in the bank remains the same.

This decline in per-share earnings is considerably less than the decline noted above for a common stock offering. It illustrates one of the prime reasons why bankers today are expressing a greater interest in the preferred stock route to raising new capital.[10]

Another reason that preferred stock financing has attracted attention in recent months is the excellent investor reception that has been given to such security offerings by public utilities. This stems in large part from the fact that corporate investors such as insurance companies receive a tax advantage from preferred stock dividends, as opposed to interest income from bonds. The 85% intercorporate dividends credit reduces their net tax rate substantially by exposing only 15% of the dividend to the full corporate rate; in contrast, interest income from bonds and debentures is taxable at the regular rate. Public utility companies which have made simultaneous offerings of preferred stock and mortgage bonds in recent months have found that they can issue preferreds at rates only slightly above the cost of bond financing. For example, Alabama Power Co. issued first mortgage bonds in early May 1963, which were re-offered to yield 4.37%, while a simultaneous offering of preferred stock by the same company provided a return of 4.44%. This narrow spread compares with a differential several years ago of around 60 or 75 basis points.

[10] In the case of the recent preferred stock issue by Franklin National Bank, the annual report to shareholders noted: "While adding substantially to capital, this issue of preferred stock caused hardly any dilution in common capital equity—only 7¢ a share, compared with an estimated 34¢ a share if additional common stock had been issued."

Alternative C: Sale of Capital Notes

The third alternative for raising new bank capital through a security issue is the sale of long-term capital notes or debentures, convertible or nonconvertible. (It should be understood at the outset that these obligations would be subordinated to the claims of the bank's depositors.) In order to simplify the comparison, and also because of the closeness of the cost of capital raised through preferred stock or capital notes, an assumed 4½% rate is also taken for the coupon on nonconvertible capital notes.

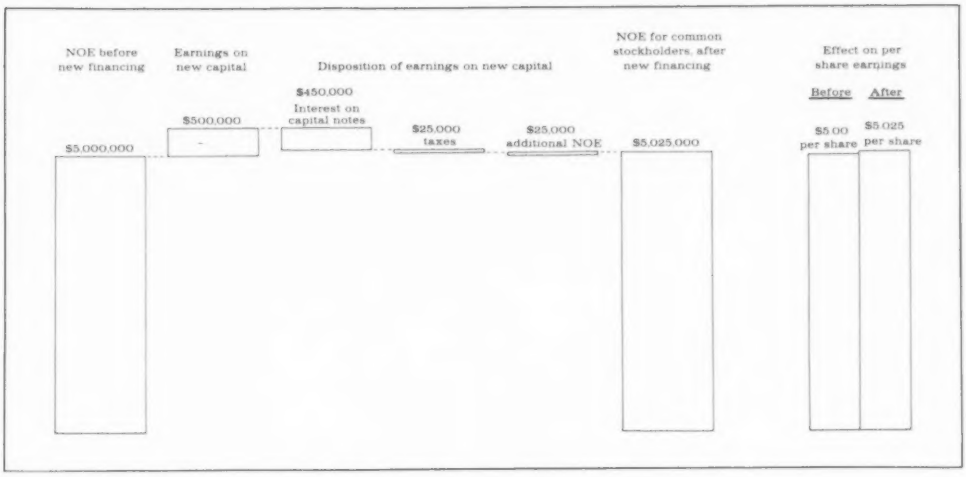
The bank's earnings on $10,000,000 new capital are again $500,000, as assumed in the two previous examples. Interest on the notes at the assumed 4½% rate amounts to $450,000 (see Chart 9). The $50,000 remaining after payment of interest is subject to Federal income taxes, which take $25,000. The result is a $25,000 addition to NOE which brings total NOE after new financing to $5,025,000.

In contrast to the two preceding examples, which showed declines in earnings per share, the financing through 4½% capital notes produces a net gain of 2½¢ in per-share earnings. This increase, as compared with the loss in the previous example, arises from the simple fact that interest paid on the notes is a deductible expense, while dividends on preferred stock are not. Book value of the common stock remains unchanged at $50, as in the preceding example.

To sum up the main points that emerge from these three examples, the sale of common stock has the major drawback of depressing per-share earnings, at least in the short run. However, common stock sales can increase the book value of a bank's stock while the sale of preferred

Chart 9

Alternative C—Sale of $10 Million Long-Term Capital Notes (4½%)



stock or capital notes does not. Selling preferred stock likewise may depress earnings per share, but by less than in the case of common stock. Dividends on preferred stock are not deductible for the issuer, but corporate investors benefit from favorable tax treatment through the intercorporate dividends credit. In the case of capital notes or debentures, the issuing bank gains a decided tax advantage, since interest expense is a deductible item; this factor allows an increase in per-share earnings of the bank's common stockholders, as long as the earnings rate on new capital exceeds the interest expense of the note issue.

The point may be raised that capital notes are not capital in the same sense as common stock. A debtor-creditor relationship is set up and trouble can occur if the interest is not paid, not to mention the obligation to repay principal at maturity. On the other hand, subordinated capital notes are junior to deposit claims, so they provide the same cushion against losses for depositors as common stock funds. In the typical case, the depositor probably has no interest in whether additional capital funds take the form of long-term subordinated capital notes, preferred stock, or common stock. Issuance of capital notes may, however, reduce the bank's over-all ability to borrow, since the total amount which a national bank may borrow (other than from the Federal Reserve or through Federal funds) may not exceed capital plus one-half of surplus.

The form in which bank capital is increased may have a differential effect on the bank's general lending limit to any one borrower, which is based on the definition of "capital" used by the respective supervisory authorities. In the case of banks subject to New York State Banking Laws, lending limits of 10% are based on capital, unimpaired surplus, and undivided profits; capital notes and debentures, as well as common and preferred stock, are treated as "capital" under General Regulation No. 5 of the Banking Board. The definition of capital used to fix the 10% lending limits of national banks clearly includes preferred and common stock and unimpaired surplus; the Advisory Committee to the Comptroller

of the Currency recommended that this definition be liberalized, and a bill has been introduced in the Congress to raise the lending limit to 15%. As to the inclusion of capital notes and debentures in the definition of capital, this question has not been resolved at the present writing.

VI. *Summary and Conclusions*

Aggregate data for the entire banking system show a persistent decline over the past 150 years in the broadest and simplest of bank capital ratios—those relating to deposits, to total assets, and to risk assets. There is no reason to doubt that these ratios will probably continue their downward trend during the years immediately ahead. This downtrend, reflecting vast structural shifts in the composition of bank assets and liabilities, has occurred against a background of major changes in the economic and financial environment of the banking system, including the role of the U.S. Government to stabilize the economy.

Standards of capital adequacy have undergone a continual evolution during the past century, moving in the direction of more sophisticated techniques of analysis and a more refined approach to the question of risks and losses which a bank's capital may be called upon to absorb. This evolution has by no means ended; further refinements of our standards of capital adequacy need to be developed and are to be expected in the years ahead, with greater emphasis on the qualitative aspects of a bank's capital needs.

Prospects for the growth of the economy and the related expansion of bank credit over the next ten years focus attention on the need for bankers to plan for growth in capital to support such expansion. This requires the weighing of many questions that surround the problem of increasing capital, either through retained earnings, assisted by stock dividends, or by outside financing through the sale of common stock, preferred stock, or capital notes. In deciding among these various routes, bankers must be alert to the implications of each on the relative costs involved, the book value of their common stock, the position of shareholders (both with respect to tax advantages and per-share earnings), and the bank's own tax position.

The dramatic structural changes that have occurred in banking since World War II, and the prospects for further changes ahead, point up the need for close attention to the problem of bank capital in relation to the demands of our economy. It is safe to predict that the next decade will witness continued debate and considerable experimentation as bankers grapple with these matters.

►WARREN L. SMITH

The Instruments of General Monetary Control

I. *Introduction*

At present, the Federal Reserve System possesses three major instruments of general monetary control: the power to buy and sell securities in the open market; the power to fix discount rates and regulate other conditions of member bank borrowing; and the power to change within specified limits the reserve requirements of member banks. This paper deals with the relative usefulness of these three credit-control instruments and with problems of their proper co-ordination.[1]

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[1] In addition to the three general credit control instruments, the System has from time to time employed selective controls, including the regulation of consumer and real estate credit. At the present time, however, the only important selective control power that the System has is the authority to regulate margin requirements applicable to loans for purchasing and carrying securities. This paper makes no effort to deal with the uses of selective controls or their co-ordination with general controls.

II. *The Primacy of Open Market Operations*

Nearly all students of American monetary affairs would probably agree that open market operations constitute the primary weapon of monetary policy. The initiative with respect to such operations lies firmly in the hands of the Federal Reserve System, and the weapon possesses great flexibility with respect to both timing and magnitude. That is,

operations can be used to produce large or small changes in credit conditions, and the direction of operations can be changed almost instantaneously.

In addition to their use to control credit in the interest of economic stability and growth, open market operations are carried on continuously for the purpose of offsetting the short-run effects on member bank reserves resulting from factors outside the control of the Federal Reserve —changes in float, currency in circulation, gold stock, Treasury and foreign deposits at the Reserve banks, and so on. These operations, which have been increasingly perfected in recent years, serve the important function of maintaining an even keel in the central money market. They also act as a kind of camouflage which frequently makes it rather difficult to discern and interpret the longer-run objectives of System policy as reflected in open market operations. Thus, since open market operations are generally going on continuously and are directed at the accomplishment of a rather complex variety of objectives, they are relatively free from the psychological overtones (sometimes called "announcement effects") that frequently accompany changes in discount rates or in reserve requirements. For reasons that will be explained below, I believe this absence of psychological implications is a rather important advantage of open market operations.

To the extent of its net purchases or sales of Government securities, the Federal Reserve changes not only the supply of bank reserves but the amount of interest-bearing Federal debt held by the public. In addition, by varying its purchases and sales in various maturity sectors of the market, it can influence the maturity composition of the publicly-held debt and, to some extent at least, the term-structure of interest rates. Thus, open market operations are a form of debt management. They should be closely co-ordinated with the Treasury's debt management decisions concerning the maturities of securities to issue or retire in its cash borrowing, refunding, and debt retirement operations.

For a period of about eight years beginning in March 1953, the Federal Open Market Committee, which is responsible for the conduct of System open market operations, adhered to the so-called "bills-only" policy, the key feature of which was that open market operations for the purpose of effectuating stabilizing monetary policy were confined to short-term securities, chiefly Treasury bills. Early in 1961, this policy was altered to a more flexible one which permitted operations in all maturity ranges of the U.S. Government securities market.[2] The primary reason for the 1961 change in policy was the emergence of a serious balance of payments deficit partly caused by substantial outflows of short-term capital to foreign money centers at a time when the domestic economy was suffering from substantial unemployment and underutilization of productive capacity.

Although System open market purchases of longer-term securities have actually been quite modest since early 1961, the greater flexibility of open market policy, together with associated shifts in the conduct of Treasury debt management activities, has undoubtedly helped to make it possible to maintain and even increase U.S. short-term interest rates in line with those abroad, thus preventing excessive outflows of short-term funds, while at the same time preventing increases in the long-term bond yields and mortgage interest rates which influence plant and equipment expenditures, capi-

[2] The changes were made at the meetings of the Federal Open Market Committee on February 7 and March 28, 1961. See the Record of Policy Actions of the Federal Open Market Committee in the *Annual Report* of the Board of Governors of the Federal Reserve System covering the year 1961, pp. 39-43 and 54-55.

tal outlays of State and local governments, and housing construction.[3]

Open market operations are firmly established as the fundamental weapon of m· .ietary policy in the United States. Accordingly, the important questions concerning the proper co-ordination of monetary control instruments really have to do with the extent to which the other weapons—discount policy and reserve requirements policy—should be used to supplement (and perhaps in certain special circumstances to replace) open market operations. Let us begin by considering discount policy.

III. *The Role of Discount Policy*

For many years prior to the Treasury-Federal Reserve Accord of March 1951, the amount of member bank borrowing from the Reserve banks was negligible. Throughout the later 1930's, the volume of excess reserves was continuously so large that it was seldom necessary for member banks to borrow. And during World War II, the Federal Reserve kept the banks amply supplied with reserves through open market operations so that there was little occasion for borrowing. The atrophied state of the discount mechanism is indicated by the fact that, for the entire period 1934 to 1943, member bank borrowing averaged less than one-tenth of one percent of total member bank reserves.

Since the Accord, the volume of borrowing has increased, especially during periods of credit restraint when the reserves of member banks have been under pressure. The Federal Reserve has encouraged this revival of the discount mechanism and has attempted to restore the discount rate to the important role it is supposed to have played in monetary policy prior to the 1930's.[4] But while member bank borrowing has increased in magnitude since the Accord, it is still very much less important as a source of reserves than it was in the 1920's. From 1951 to 1959, borrowing averaged 3.2 percent of total member bank reserves with average borrowings reaching peak levels of approximately 4-1/2 per cent of total reserves in the years 1957 and 1959, when monetary policy was relatively tight. In contrast, during the period 1922 to 1929, borrowing averaged 30.0 percent of total reserves, with the ratio rising as high as 40 percent in 1923 and 1929.

A. The Discount Rate as a Cost Factor

It is possible to distinguish two main facets of Federal Reserve discount policy. In the first place, the discount rate represents the cost of borrowed reserves, and the rate is changed from time to time for the purpose of regulating member bank

[3] In addition to open market operations and debt management, other policy actions have helped to "twist" the interest-rate structure; i.e., to raise short-term rates while exerting as much downward pressure as possible on long-term rates. The increase in interest rate ceilings applicable to time deposits by the Federal Reserve and the FDIC at the beginning of 1962 enabled U.S. commercial banks to compete more effectively with foreign banks for deposits and also attracted an enlarged supply of funds into time deposits—funds which were largely channelled into mortgages and State and local government securities, thus bringing down yields on such securities. And the reduction of reserve requirements on time deposits from 5 to 4 percent in October and November 1962, combined with action to sustain Treasury bill yields, undoubtedly also helped to some extent.

[4] In connection with the Accord itself, the Treasury and the Federal Reserve agreed upon the desirability of reviving the discount mechanism as a means for making adjustments in bank reserve positions. See the identical statements concerning the Accord by the Secretary of the Treasury and the Chairman of the Board of Governors in *Monetary Policy and Management of the Public Debt—Replies to Questions and Other Materials for the Use of the Subcommittee on General Credit Control and Debt Management*, Joint Committee on the Economic Report, 82nd Congress, 2d Session, Washington: U. S. Government Printing Office, 1952, Part I, pp. 74-76 and 349-51.

borrowing. Changes in the rate for this purpose should be co-ordinated as closely as possible with open market operations. In addition, however, the discount rate at times plays an independent role in monetary policy, serving as a signal to the economy of changes in Federal Reserve policy. Let us first consider the discount rate as a regulator of member bank borrowing.

1. *Cost versus "reluctance" as a regulator of borrowing*

Due to the organization of the banking and financial system in the United States, it has not been feasible to establish the discount rate as a "penalty rate" in the sense in which this has been the case in Britain. There a penalty rate has been possible because the discount houses rather than the banks have customarily done the borrowing from the Bank of England. Since the discount houses have made a practice of carrying quite homogeneous portfolios of commercial bills and, in recent years, Treasury bills, it has been feasible to keep the Bank rate above the yield on such bills, so that when the discount houses are "forced into the bank" (as the phrase goes), they lose money on their borrowings. Traditionally, this penalty rate has served to keep borrowing from the Bank of England to a minimum and to make the interest rate structure highly sensitive to monetary action carried out through the co-ordinated use of open market operations and the discount rate.[5]

In the United States, member banks borrow directly from the Reserve banks, and since there are very many member banks operating in numerous local and regional, as well as national, credit markets and investing in a great variety of earning assets bearing a wide range of yields, it is not feasible to maintain a true penalty rate.[6]

Since the 1920's, it has come to be widely accepted doctrine that use of the System's discount facilities is restrained by a tradition against borrowing on the part of member banks.[7] As evidence in support of this view, which has come to be known as the "reluctance theory," it was pointed out that in the 1920's open market interest rates were more closely related to the amount of outstanding member bank borrowing than they were to the discount rate, suggesting that member banks did not like to be in debt and, when they were, tended to liquidate secondary reserve assets in order to repay their borrowings, thus forcing up open market interest rates.[8]

[5] For a good recent discussion, see R. S. Sayers, *Modern Banking* (4th ed.; Oxford: Clarendon Press, 1958), pp. 104-14. As indicated by Sayers, both the indirect nature of the relation between the commercial banks and the Bank of England and the penal Bank rate have become somewhat attenuated in recent years, as the Bank has developed the alternative practice of supplying funds to the discount houses and in some cases to the commercial banks themselves by purchasing Treasury bills at the market rate.

[6] In order to be a penalty rate with respect to a particular bank, the rate does not need to be higher than the expected return on all of the bank's earning assets. In fact, in a sense, it is a penalty rate if it is higher than the expected return on the lowest yielding assets in the bank's portfolio. However, the discount rate can be a penalty rate in this sense in relation to some banks and not others, due to differences in the composition of the banks' portfolios.

[7] This argument was advanced in W. W. Riefler, *Money Rates and Money Markets in the United States*, New York: Harper & Bros., 1930, esp. Chap. II. According to Riefler, the tradition against borrowing existed among commercial banks prior to the formation of the Federal Reserve System and was strengthened during the 1920's by the System's discouragement of borrowing for other than temporary purposes.

[8] *Ibid.*, pp. 25-28; also W. R. Burgess, *The Reserve Banks and the Money Market*, Rev. ed.; New York: Harper & Bros., 1946, pp. 219-21.

Although the purposes for which banks borrow—to maintain their reserve positions in the face of customer withdrawals or clearing drains and to meet temporary (e.g., seasonal) increases in their customers' demands for loans—are commonly so pressing as probably to be quite cost-inelastic, it does not follow that member bank borrowing is insensitive to the discount rate. Banks have a choice of obtaining additional funds by borrowing at the Federal Reserve or by liquidating secondary reserves or other investment securities. Given a certain "reluctance to borrow," the major factor influencing the choice will presumably be the relevant cost of funds obtained by the various methods, and this depends chiefly on the relation between the discount rate and the yield on assets that the bank might liquidate. In principle, the relevant comparison is between the discount rate and the expected yield on the asset whose liquidation is being considered over the period of time for which the funds will be needed, taking account of any capital gains or losses that may be involved. For instance, if interest rates are expected to fall during the period, the relevant interest rate for comparison with the discount rate may be higher than the current interest rate on the asset. This factor will be more important the longer the maturity of the asset.[9]

Thus, there is little doubt that commercial banks are "reluctant" to borrow in the sense that borrowing is felt to involve a form of disutility. However, the banks' reluctance can be overcome provided that the profits to be obtained from borrowing (as compared with other means of obtaining reserves) are sufficiently attractive—that is, banks balance the disutility of borrowing against the utility of further profits.[10] Moreover, not all banks are equally reluctant to borrow: [11] this is evidenced by the fact that the Federal Reserve has found it necessary to discourage "continuous borrowing" and to bolster the banks reluctance in its regulations covering discounts and advances.[12] In addition, the System keeps the borrowing practices of individual member banks under constant surveillance and in this way attempts to reinforce the banks' reluctance to borrow. At the same time, the System apparently does not unequivocally refuse to lend to member banks, despite the fact that it has authority to do so under the Federal Reserve Act.[13]

2. *Co-ordination of open market operations and discount policy*

It used to be said with reference to monetary policy in the 1920's that open

[9] See W. L. Smith, "The Discount Rate as a Credit-Control Weapon," *Journal of Political Economy*, LXVI, April 1958, pp. 171-77; Ralph Young, "Tools and Processes of Monetary Policy," in N. H. Jacoby, *United States Monetary Policy*, The American Assembly, Columbia University, 1958, pp. 13-48, esp. pp. 26-27.

[10] For a systematic development of this point of view, together with some evidence to support it, see the interesting article by M. E. Polakoff, "Reluctance Elasticity, Least Cost, and Member-Bank Borrowing: A Suggested Integration," *Journal of Finance*, XV, March 1960, pp. 1-18.

[11] On this, see Lauchlin Currie, *The Supply and Control of Money in the United States*, Cambridge: Harvard University Press, 1935, Chap. VIII.

[12] See Regulation A of the Board of Governors regulating member bank borrowing as revised effective February 15, 1955, (*Federal Reserve Bulletin*, January 1955, pp. 8-14). The Foreword to the revised Regulation contains a statement of "General Principles" (pp. 8-9) which attempts to delineate in a general way the purposes for which member banks should and should not use the System's discount facilities.

[13] On the subtleties of non-price rationing in the administration of the discount window, see C. R. Whittlesey, "Credit Policy at the Discount Window"; R. V. Rossa, "Credit Policy at the Discount Window: Comment;" and Whittlesey, "Reply," *Quarterly Journal of Economics*, LXXIII, May 1959, pp. 207-16, and 333-38.

market operations served the function of making the discount rate effective.[14] In order to implement a restrictive monetary policy, the Federal Reserve would sell Government securities in the open market; this would put pressure on member bank reserve positions and cause them to increase their borrowings. At this point the discount rate would be raised, and the increase in borrowings was supposed to help to insure that the discount rate increase would be transmitted through into an increase in other interest rates.[15]

In view of the primary role of open market operations under present conditions, it is better to look at the matter the other way around and to say that the discount rate can be used to support and strengthen the effectiveness of open market operations. Thus, when the System, for example, wishes to implement a restrictive policy during a period of inflation, it uses open market operations to keep down the supply of reserves in relation to the swelling demands for credit. As a result, interest rates rise and member banks, finding their reserve positions under increased pressure, tend to increase their borrowings from the Reserve banks. In order to discourage the creation of additional reserves through borrowing, the System can raise the discount rate in pace with the increase of other interest rates. Thus the discount rate can be used to supplement and strengthen open market operations. Conversely, when the System desires to ease credit conditions, it provides additional reserves through open market operations, and in order to discourage members banks from using a portion of the new reserves to repay indebtedness at the Reserve banks, the discount rate can be lowered.[16]

A variant of this reasoning which stresses the reluctance of member banks rather than the discount rate has also been expressed by persons connected with the Federal Reserve System. According to this view, most member bank borrowing arises out of the fact that in a unit banking system such as ours with a very large number of banks, individual banks often find their reserve positions unexpectedly depleted as a result of unfavorable clearing balances associated with redistribution of reserves among the banks. Borrowing is a handy means of making temporary adjustments in reserve positions; if the depletion of a bank's reserve position lasts very long, the bank may later adjust by liquidating secondary reserves, using the proceeds to repay its borrowing at the Reserve bank.[17] The pressure on banks to make prompt adjustments in portfolios in order to repay borrowing depends on the level of the discount rate in relation to other interest rates.

At times when monetary policy is tight and the Federal Reserve is maintaining pressure on bank reserve positions in the interest of limiting excessive growth of bank credit, more banks will be managing

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[14] Burgess, *op. cit.*, p. 239.

[15] This is rather similar to the classical British practice of selling in the open market to reduce the cash reserves of the commercial banks. To replenish their cash reserves, the banks would call some of their loans to the discount houses. The discount houses, in turn, would be forced to borrow from the Bank of England at the (penalty) Bank rate, and as a result of the ensuing adjustments bill rates would be forced up. Thus, open market operations were said to have the function of "forcing the market into the Bank."

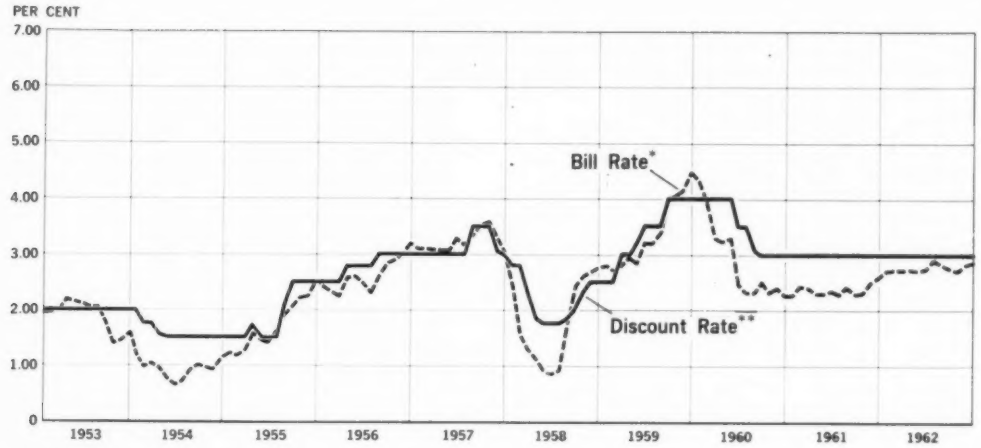
[16] See the statement of the Chairman of the Board of Governors concerning the relation between the discount rate and open market operations in *United States Monetary Policy: Recent Thinking and Experience,* Hearings before the Subcommittee on Economic Stabilization of the Joint Committee on the Economic Report 83d Congress, 2d Session, Washington: U. S. Government Printing Office, 1954, p. 11. A similar view is suggested in C. E. Walker, "Discount Policy in the Light of Recent Experience," *Journal of Finance,* XII, May 1957, pp. 223-37, esp. pp. 232-34.

[17] Roosa, *op. cit.*, p. 335.

Chart 1

Federal Reserve Discount Rates and Market Yield on Treasury Bills

1953–1962



* Monthly average of daily yields on outstanding issues.
** Average of discount rates at all Federal Reserve banks.

Source: Board of Governors of the Federal Reserve System.

their reserve positions closely, reserve deficiencies will occur more frequently, and member bank borrowing will increase.[18] Due to the fact that the banks are reluctant to borrow, the increase in borrowing causes them to adopt more cautious lending policies and to reduce the availability of credit. However, since banks balance the disutility of borrowing against the utility of increased profits, it is necessary to make successive upward adjustments in the discount rate as interest rates rise due to the effects of the restrictive policy, in order to stiffen the banks' reluctance to remain in debt and to encourage them to contract their loans and investments.

It may be noted, however, that short-term open market interest rates are subject to a considerable amount of random variation in the short run and that, under present arrangements, the discount rate is only changed at irregular and rather infrequent intervals. For this reason, the differential between the discount rate and other interest rates varies rather erratically. This is apparent from Chart 1, which shows the movements of the dis-

[18] *Ibid.*, p. 336. A similar argument is presented by Young, *op. cit.*, who says (p. 34): "As a policy of monetary restraint continues or is accentuated, there will be more frequent and more widespread reserve drains among member banks. This will lead an increasing number of banks to borrow temporarily at the discount window of the Reserve Banks in order to maintain their legal reserve positions. For each bank, the borrowing will be temporary, but the repayment by one bank draws reserves from other banks, which in turn will have need to borrow at a Reserve Bank. Thus, restrictive monetary action leads to a larger volume of member bank borrowings, as more banks find their reserve positions under pressure more often."

count rate and the yield on outstanding Treasury bills since 1953. As a result of the continuously shifting relation between the discount rate and other interest rates, the willingness of banks to borrow presumably undergoes considerable erratic variation.

3. *Does borrowing reinforce or offset open market operations?*

There has been some discussion as to whether the increase in member bank borrowing that occurs during a period of credit restriction is a factor which intensifies the restrictive effects or a loophole which weakens the effectiveness of monetary policy.[19] It is almost certainly true that, as a result of the reluctance of member banks to borrow, banks tend to follow somewhat more restrictive and cautious polices as far as loans are concerned when they are in debt to the Reserve banks than when they are not in debt. However, the important thing to bear in mind is that if banks were constrained not to borrow when their reserve positions were impaired by a restrictive policy, they would have to adjust their reserve positions in some other way. This would ordinarily mean contraction of loans or investments.[20] Thus, in the absence of borrowing, the adjustment would itself *consist in* restricting credit. On the other hand, to the extent that borrowing occurs, restrictive effects are postponed and banks are merely put in such a position that they are somewhat more likely to restrict credit at some future time. Moreover, it should be noted that borrowing by one member bank for the purpose of adjusting its reserve position adds to the *aggregate* reserves of all member banks and thus indirectly takes some of the pressure off other banks. Adjustment of reserve positions through liquidations of securities, on the other hand, does not add to the reserves of the system of banks.[21]

Thus, it seems clear that the effect of increased member bank borrowing at a time when a restrictive policy is being applied is to offset rather than to reinforce the restrictive policy. The effect may not be very important in itself, since the induced increase in borrowing is not likely to be large enough to pose a serious problem for the authorities; it merely means that a somewhat more restrictive open market policy is required than would otherwise be necessary. However, there are a number of other offsetting reactions in the banking and financial system—such as shifts in the composition of bank portfolios from Government securities to loans, adjustments by financial intermediaries, and so on—and the addition of one more such reaction, even though not quantitatively very large, may not be wholly without significance.

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[19] Roosa seems to imply that it has an intensifying effect ("Credit Policy at the Discount Window," *op. cit.*). Whittlesey ("Credit Policy at the Discount Window," and "Reply" [to Roosa's comment], *op. cit.*) contends that it is an offset, although not, under present conditions, a very important one.

[20] Another possibility is that banks might make greater use of the Federal funds market to adjust their reserves. Although use of this market has increased in recent years, the number of participating banks is still rather small, and there are technical impediments to a substantial increase. (See *The Federal Funds Market*, Washington: Board of Governors of the Federal Reserve System, 1959. Increased use of the Federal funds market during periods when credit is being restricted economizes the use of existing reserves, reduces excess reserves, and thereby constitutes an offset to the initial restrictive action (see H. P. Minsky, "Central Banking and Money Market Changes," *Quarterly Journal of Economics*, LXXI, May 1957, pp. 171-87). Thus, resort to the Federal funds market has effects similar to member bank borrowing (as explained below).

[21] Smith, "The Discount Rate as a Credit-Control Weapon," *op cit.*, p. 172-73; also P. A. Samuelson, "Recent American Monetary Controversy," *Three Banks Review*, March 1956, pp. 10-11.

Another point of view that has been expressed concerning the discount mechanism is that, while it has an offsetting effect, this effect is actually helpful to the monetary authorities, because it can be likened to a brake on an automobile. It is said that brakes, by making it possible to control the car more effectively, permit one to drive at a higher rate of speed than would otherwise be possible.[22] Similarly, the discount mechanism, although seeming to weaken monetary controls, actually strengthens them by making it possible to use other controls (chiefly open market operations) more vigorously. However, this is not a proper analogy. If the automobile simile is retained, the discount mechanism is more like a defective clutch than a brake, and few would argue that a slipping clutch makes it possible to drive at a higher rate of speed.[23] A brake is a discretionary weapon and not a device that automatically operates more intensively, the harder one pushes on the accelerator.

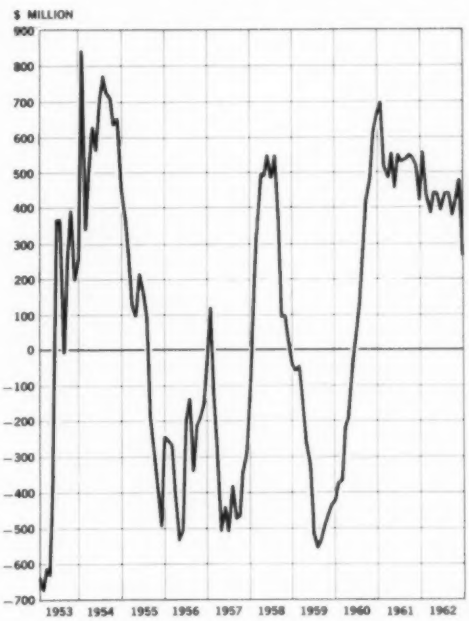
4. *A critique of the concept of "free reserves"*

A by-product of the revival of the discount mechanism since the Accord is the emphasis that has been placed on the level of "free reserves" as an immediate guide to System policy. "Free reserves," of course, is simply the difference between aggregate member bank excess reserves and aggregate member bank borrowings. It appears that, increasingly in the last few years, the System has been setting its proximate goals of monetary policy in terms of "target" levels of free reserves. As can be seen from Chart 2, free reserves have been positive (excess reserves greater than borrowings) during periods of credit ease, as in 1953-54, 1958, and 1960-63, while during periods of credit restriction, free reserves have been negative (i.e., borrowings have been greater than excess reserves, or there have been "net borrowed reserves"). It has become commonplace to judge the objectives and direction of monetary policy to

Chart 2

Free Reserves of Member Banks*

1953–1962



* Monthly averages of daily figures.

Source: Board of Governors of the Federal Reserve System.

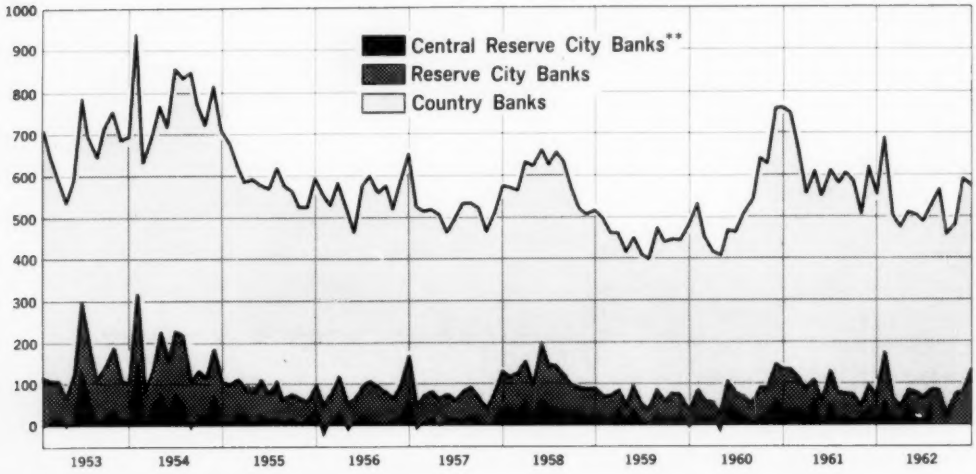
[22] P. A. Samuelson, "Reflections on Monetary Policy," *Review of Economics and Statistics*, XLII, August 1960, p. 266.

[23] If the motor were too powerful for the car —e.g., if a Cadillac motor were mounted in a Volkswagen—I suppose a clutch that slipped might be helpful. But the proper analogy for the relation between monetary policy and the stability of the economy may well be just the reverse; i.e., monetary policy can be likened to a Volkswagen motor which has been assigned the task of operating a heavy Cadillac.

Chart 3

Excess Reserves of Member Banks by Reserve Requirement Classifications*

1953–1962



* Monthly averages of daily figures.
** Central Reserve City Classification terminated July 28, 1962

Source: Board of Governors of the Federal Reserve System.[1]

a considerable extent by the changes that take place in free reserves.[24]

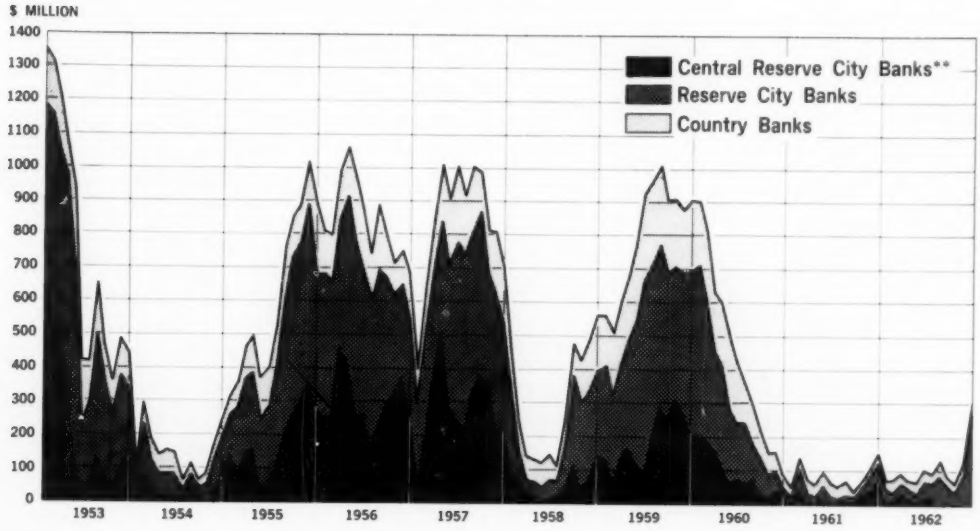
The first thing to notice about free reserves is that the two components that compose it—excess reserves and borrowings—are distributed quite differently among member banks. Excess reserves tend to be heavily concentrated in the hands of country banks, while most of the borrowing is ordinarily done by reserve city banks. (See Charts 3 and 4.) Country banks tend to hold fairly substantial amounts of excess reserves most of the time, and are able to absorb pressure by drawing down such excess reserves. Reserve city banks, on the other hand, manage their reserve positions more closely, hold relatively small amounts of excess reserves, and borrow more frequently from the Federal Reserve when they are placed under pressure. Of course, these behavior patterns do not coincide exactly with the arbitrary classifications of banks for reserve requirement purposes—some reserve city banks, for example, undoubtedly hold large excess reserves, while some country banks manage their reserve positions closely. Nevertheless, it is quite clear that there are substantial differences among banks with respect to

[24] No matter what the shortcomings of free reserves as a guide to monetary policy, it is appropriate for those who are attempting to judge the character of System policy to pay close attention to this magnitude simply because the System does seem to use it as a guide.

Chart 4

Discounts and Advances of Member Banks by Reserve Requirements Classifications*

1953–1962



* Monthly averages of daily figures.
** Central Reserve City Classification terminated July 28, 1962.

Source: Board of Governors of the Federal Reserve System.[1]

holdings of excess reserves and reliance on borrowing from the Federal Reserve. And there is no reason to suppose that an increase in borrowings on the part of one group of banks would be exactly offset, insofar as effects on credit conditions are concerned, by an equal increase in holdings of excess reserves by another group of banks. That is to say, for example, that $500 million of net borrowed reserves might have quite different implications depending upon whether it was the resultant of $1.5 billion of borrowings and $1 billion of excess reserves or the resultant of $700 million of borrowings and $200 million of excess reserves.

It should be noted, however, that in practice a very large proportion of the variation in free reserves is attributable to variation in borrowings.[25] The amount of excess reserves is negatively correlated with member bank borrowing; consequently, an increase (decrease) in free reserves is likely to be attributable partly to a decrease (increase) in borrowings and partly to an increase (decrease) in excess reserves. However, as a comparison of Charts 3 and 4 indicates, the variation in borrowings is much greater than the variation in excess reserves; in fact, the variance of borrowings accounts for about 62 percent of the variance of free reserves, whereas the variance of excess reserves accounts for only 7.7 percent, the remainder being attributable to the effects of the negative correlation that exists between borrowings and excess re-

[25] Young, *op. cit.*, p. 35.

serves.[26] This suggests that the behavior of free reserves is largely explained by the behavior of borrowings and that excess reserves are not ordinarily a very important factor.

It was pointed out earlier that the amount of borrowing that member banks will want to do can be expected to depend, among other things, on the relation between the discount rate and other interest rates, which can for our present purposes be represented by the Treasury bill rate. Since borrowing is the main element in free reserves, this suggests that the amount of free reserves member banks will desire to hold will vary inversely with the difference between the bill rate and the discount rate. As the bill rate rises relative to the discount rate, banks will tend to increase their borrowings and desired free reserves will fall; conversely, as the bill rate falls in relation to the discount rate, they will tend to repay existing indebtedness to the System, and desired free reserves will rise.[27]

Thus, during a period of credit restriction, as market interest rates rise with the discount rate lagging behind, desired free reserves will decline, and the banks will attempt to reduce actual free reserves. If the Federal Reserve attempts to hold free reserves constant, it will have to adjust its open-market policy to increase total reserves, thereby weakening the over-all restrictive effect of its policy. Conversely, when economic activity begins to level off in the late stages of an expansion, market interest rates may begin to fall. Under these circumstances, with a given or lagging discount rate, desired free reserves will increase, and if the Federal Reserve attempts to hold free reserves constant, it will have to tighten its open-market policy, and the over-all restrictive effect of monetary policy is likely to become stronger.[28]

This suggests that it is wrong to believe that a constant level of free reserves means a constant degree of credit tightness or ease. At the very least, it would be necessary to adjust the discount rate continuously to the changing level of market rates. Even if this were done, changes in other factors would mean that the effective degree of credit restriction could vary substantially while the level of free reserves was held constant.

Nor is an increase (decrease) in free reserves an unambiguous indication that credit has become easier (tighter). For example, if credit is tightened by raising the discount rate, the rise in the cost of borrowed reserves will cause the banks to reduce their borrowings, making offsetting adjustments in their reserve positions perhaps by selling Treasury bills. Total reserves will decline and interest rates will rise. But this tightening of credit will be accompanied by an increase in free reserves—indeed the increase in free reserves will be the means through which credit-tightening comes about.

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[26] Free reserves (R) is given by

$$R = X - B,$$

where X = excess reserves and B = borrowings from Federal Reserve banks. The variance of R is given by

$$\sigma_r^2 = \sigma_x^2 + \sigma_b^2 - 2r_{xb}\sigma_x\sigma_b, \qquad (1)$$

where σ_x^2 = variance of excess reserves, σ_b^2 = variance of borrowings, and r_{xb} is the coefficient of correlation between excess reserves and borrowings. Based on monthly data (averages of daily figures) for the period January 1953, through March 1960, r_{xb} is $-.697$. Using expression (1) the variance of excess reserves accounts for 7.7 percent of the variance of free reserves, the variance of borrowings accounts for 61.8 percent, and the remaining 30.5 percent is accounted for by the tendency for borrowings to vary inversely with excess reserves (as reflected in the term $-2r_{xb}\sigma_x\sigma_b$).

[27] This is pointed out by Milton Friedman in *A Program for Monetary Stability*, New York: Fordham University Press, 1959, pp. 41-43. See also the excellent study by R. J. Meigs, *Free Reserves and the Money Supply*, Chicago: University of Chicago Press, 1962.

[28] Friedman, *op. cit.*, p. 42.

On the other hand, if credit is tightened by open market sales of securities while the discount rate remains constant, the resulting rise in the bill rate (and other short-term open market interest rates) will make borrowing relatively more attractive as a means of obtaining reserves. The resulting increase in borrowing will reduce free reserves—thus, a tightening of credit will be associated with a decline in free reserves. But even in this case, the increased borrowing that is reflected in declining free reserves tends to increase total reserves and thereby to offset a portion of the restrictive effect of the initial open market sales.

"Free reserves" is an artificial construct, which has had the unfortunate effect of providing a spuriously exact guide to the monetary authorities—or at least has been so interpreted by persons outside the Federal Reserve System.[29] If the discount rate were regulated in such a way as to maintain a constant differential between it and the Treasury bill rate (a possibility that is discussed below), the amount of free reserves might perhaps become a somewhat better index of credit conditions than it is at present. Even in that case, however, it would commonly be a mistake to assume that a constant level of free reserves would necessarily mean a constant degree of credit tightness or ease. It would be better under most circumstances for the System to set its proximate goals in terms of interest rate behavior and growth of total reserves and to allow free reserves to seek the levels required to achieve these goals.

[29] The fact that the System officials are aware of the shortcomings of the free reserves concept is apparent from the criticisms directed at it by Ralph Young, (*op. cit.*, pp. 35-36). Young points out one defect not referred to above—the fact that the amount of free reserves is subject to considerable day-to-day and week-to-week variations, due to unpredictable changes in factors outside the control of the Federal Reserve authorities.

B. The Discount Rate as a Signal

Thus far, we have been considering changes in the discount rate as an adjunct to open market operations, the purpose of which is to serve as a partial governor of member bank indebtedness by regulating the cost of obtaining reserves by borrowing as compared with sales of secondary reserves.

To some extent, the discount rate also plays an independent role in monetary policy by serving as a signal of the intentions of the monetary authorities. Particularly at turning points in business conditions, a change in the discount rate is often the first clear indication of a basic alteration in monetary policy. Discount rate changes of this kind are said to have psychological effects or "announcement effects," which may influence business conditions by altering the expectations of businessmen and financial institutions.[30]

1. *Difficulties of interpreting discount rate adjustments*

It is commonly taken for granted that the announcement effects of discount rate changes are normally such as to strengthen the impact of monetary policy. However, those who advance the expectations argument have not explained in any detail the way in which the expectational effects are supposed to work. Actually, there are several different possible expectational effects, and in the case of each of them there is some uncertainty concerning even the direction (let alone the magnitude) of the effects.

One of the difficulties is that many changes in the discount rate are merely technical adjustments designed to restore or maintain an appropriate relationship between the discount rate and other rates of interest, as indicated above. Most of the periodic adjustments that are made

[30] See, for example, Burgess, *op. cit.*, pp. 221-230.

during periods when interest rates are gradually rising or falling are of this nature. However, the interpretation placed on even these rather routine changes is sometimes unpredictable, because their timing may be affected by various considerations not directly related to stabilization policy. Sometimes, for example, discount rate adjustments may be accelerated in order to get the possible accompanying disruptive effects on the securities markets out of the way before an important Treasury debt management operation is scheduled. Or, on the other hand, action may be postponed until the repercussions of a forthcoming debt management operation are out of the way. Furthermore, the very fact that technical adjustments are sometimes interpreted by the public as having policy implications may affect System decisions concerning the timing of such adjustments. Such factors as these not only tend to make the interpretation of discount rate changes difficult, but are also partly responsible for the System's difficulties, referred to earlier, in adjusting the discount rate frequently enough to maintain a reasonably stable relation between that rate and other interest rates.[31]

Partly as a result of erratic timing and partly due to the fact that the business situation is usually fraught with some uncertainty, discount rate changes that are in fact meant to be merely routine adjustments are sometimes endowed with importance as "straws in the wind" regarding System policy by the press and by students of financial and economic affairs. And sometimes even a *failure* to change the discount rate so as to maintain "normal" interest rate relationships is taken as a sign of a change of System policy. Moreover, it is quite common for different commentators to place different interpretations on System action—or even lack of action—with respect to the discount rate.

The truth is that changes in the discount rate constitute the crudest kind of sign language.[32] Why this Stone Age form of communication should be regarded as superior to ordinary English is really quite difficult to understand. And, in this particular case, the use of such crude signals is subject to a special disadvantage arising from the fact that the signal itself has an objective effect on the situation in addition to serving as a means of communication. That is, changes in the discount rate combine action and communication, and there may be times when it is proper to act and not speak and other times when it is proper to speak and not act.

It is possible that some of the disadvantages of discretionary discount rate changes could be overcome, if the changes that were made were accompanied, at least under some circumstances, by statements explaining the reasons underlying the action. However, a change in the discount rate requires ac-

[31] As Friedman puts it (*op. cit.*, p. 40): "The discount rate is something that the Federal Reserve must continually change in order to keep the effect of its monetary policy unchanged. But changes in the rate are interpreted as if they meant changes in policy. Consequently, both the System and outsiders are led to misinterpret the System's actions and the System is led to follow policies different from those it intends to follow."

[32] Some writers seem to show no realization of the difficulties involved in this peculiar form of communication. For example, Walker (*op. cit.*, pp. 229-30) says: "Discount policy—particularly with respect to changes in the rate—is a simple and easily understandable technique for informing the market of the monetary authorities' views on the economic and credit situation. Open-market operations, which are used to cushion the effects of seasonal influences as well as for cyclical and growth purposes, may at times be confusing to some observers because the System may be supplying funds to the market . . . when cyclical developments clearly dictate a restrictive monetary policy, or vice versa. The time-honored device of raising or lowering discount rates, however, can hardly be susceptible to misinterpretation by even the most uninformed observers."

tion by the boards of directors of the Federal Reserve banks and approval by the Board of Governors.[33] As a result, a very large number of persons are involved and the reasons for the action may vary among the different participants—some of whom may not thoroughly approve of the action—thus making it difficult to agree upon a generally acceptable accompanying statement.[34] This raises an interesting question: how can the general public and the business community help but be confused in their interpretations of a change in the discount rate when the persons who are responsible for making the change are not themselves entirely clear about the reasons for it?

2. *Announcement effects of discount rate adjustments*

In addition to the confusion resulting from the fact that some discount rate adjustments are meant to be signals of a change in monetary policy while others are not, there is a further question whether the resulting announcement effects, even when they are intended, will help to stabilize the economy. Announcement effects work through expectations, and the relationships involved are quite complex. It is possible to break down expectational reactions into reactions of lenders, reactions of borrowers, and reactions of spenders.[35]

a. *Expectational effects on lenders and borrowers.* A discount rate change may cause shifts in lenders' supply curves of funds and/or in borrowers' demand curves, the nature of these shifts depending upon the kind of expectations prevailing among lenders and borrowers. If interest rate expectations are elastic, a rise (fall) in present interest rates creates expectations of an even larger proportionate rise (fall) in future interest rates, whereas, with inelastic expectations, a rise (fall) in present interest rates induces the expectation of a smaller proportionate rise (fall) in future interest rates.[36]

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[33] In this connection, see the interesting paper by H. C. Carr, "A Note on Regional Differences in Discount Rates," *Journal of Finance*, XV, March 1960, pp. 62-68, which uses differences in the timing of discount rate changes on the part of different Reserve banks as a means of classifying the banks as "leaders," "follow-the-leaders," "middle-of-the-roaders," and "dissenters." By studying rate increases and rate decreases separately, he also tries to discern differences in the banks' attitudes toward inflation and deflation.

[34] This is pointed out by Burgess (*op. cit.*), who says: "No reasons for the action are ordinarily given out at the time, partly because the decision represents the views of many people, who have perhaps acted for somewhat diverse reasons, so that it would be an extremely difficult task to phrase a statement which would fairly represent the views of all the directors of the Reserve Bank concerned and the Washington Board; and partly because it would be equally difficult to make any statement which did not either exaggerate or minimize the importance of the change. Such a statement is always subject to misinterpretation, as has been repeatedly illustrated." This statement was written a number of years ago, but it probably still reflects rather accurately the problem involved and the attitudes of those responsible for the administration of the discount rate.

[35] Our approach follows that adopted in dealing with the expectational effects of monetary policy in general by Assar Lindbeck in his study entitled *The "New" Theory of Credit Control in the United States*, Stockholm Economics Studies, Pamphlet Series, No. 1, Stockholm: Almquist & Wiksell, 1959, pp. 25-29, and 38-39, To a considerable extent, borrowers and spenders are the same people, of course, but it is useful to consider the two activities separately.

[36] We are using the Hicksian concept of the elasticity of expectations, defined as

$$N = \frac{r_2^e - r_1^e}{r_1^e} \Big/ \frac{r_2 - r_1}{r_1},$$

where r_1 and r_2 stand for the present interest rate before and after the change, r_1^e and r_2^e stand for the expected future interest rate before and after the change. Elastic expectations, as the term is used above, means $N > 1$, while inelastic expectations means $N < 1$. See J. R. Hicks, *Value and Capital*, 2d ed.; Oxford: Clarendon Press, 1946, Chap. xvi.

Let us take the case of a discount rate increase and suppose that initially it causes a rise in market interest rates. If lenders have elastic expectations, they may reduce their present commitments of funds in order to have more funds available to invest later on, when interest rates are expected to be relatively more favorable. Conversely, if lenders have inelastic expectations, they may increase the amounts of funds they are willing to supply at the present time. Borrowers, on the other hand, may postpone their borrowing if they have inelastic expectations and accelerate it if they have elastic expectations. For a reduction in the discount rate, all of these reactions are reversed.

According to this view, the announcement effects of a discount rate adjustment will be clearly of a stabilizing nature if lenders have elastic expectations and borrowers have inelastic expectations, since in this case an increase in the discount rate will reduce both the demand for and the supply of funds, while a reduction in the discount rate will increase both demand and supply. On the other hand, if lenders have inelastic and borrowers elastic expectations, the effects will be clearly destabilizing, while if both groups have elastic or both have inelastic expectations, the outcome is uncertain and will depend on the relative strengths of the two reactions.[37]

Thus, in order to get favorable reactions on both sides of the market, it is necessary for lenders and borrowers to have the opposite kinds of expectations—a phenomenon that does not seem very likely. However, the significance of all of these considerations is considerably reduced due to the fact that, in practice, their main effects may be confined to producing changes in the interest rate structure. That is, a lender who has elastic interest rate expectations is not very likely to reduce the total supply of funds offered in the market; rather, he is likely to reduce his supply of funds in the longer-term sectors of the market, putting the funds into the short-term sector, while he awaits the expected rise in yields. Or, if he has inelastic expectations, he may shift funds from the short- to the long-term sector. Conversely, a borrower who has elastic expectations may not accelerate his total borrowings, but instead merely increase the proportion of his borrowing in the long-term market. Or, if he has inelastic expectations, he may shift a portion of his borrowings from the long-to the short-term market.[38] With our present

[37] In the case of an increase in the discount rate, if both lenders and borrowers have elastic expectations, lenders will reduce their offerings of funds while borrowers will increase their demands. If both have inelastic expectations, lenders will increase their supplies and borrowers will reduce their demands. In each of these cases, the outcome will depend upon the relative magnitudes of the respective shifts of demand and supply, as well as on the interest elasticities of demand and of supply.

[38] If lenders have elastic and borrowers inelastic expectations, both demand and supply will tend to shift from the long- to the short-term market following a rise in the discount rate, and the shifts will tend to cancel each other out as far as their effects on the interest rate structure are concerned. It may be noted that the typical behavior of the interest rate structure is consistent with the hypothesis that both borrowers and lenders have inelastic expectations, since in this case (with a rise in the discount rate), demand would shift from the long- to the short-term market while supply would shift from the short- to the long-term market and these reactions would cause a rise in short-term interest rates relative to long-term rates. When rates are generally high, short-term rates actually do often tend to be higher than long-term rates. This is also consistent with the behavior postulated by the general expectational theory of the interest rate structure when expectations are inelastic, as set forth in Tibor Scitovsky, "A Study of Interest and Capital," *Economica*, VII, n.s., August 1940, pp. 293-317; see also F. A. Lutz, "The Structure of Interest Rates," *Quarterly Journal of Economics*, LV, November 1940, pp. 36-63, reprinted in W. Fellner and B. F. Haley (eds.), *Readings in the Theory of Income Distribution*, Philadelphia: Blakiston Co., 1946, pp. 499-529.

limited knowledge concerning the effects of changes in the structure of interest rates on the level of expenditures, it is impossible to judge the effects of such shifts in the supply and demand for funds between the long- and short-term markets. It does seem safe to conclude, however, that the effects would not be very important.

b. *Expectational effects on spenders.* A discount rate adjustment may affect not only interest rate expectations of lenders and borrowers but also the sales and price expectations of businessmen on which spending plans are based. However, it is not entirely clear what the nature of these effects would be or how they would affect economic stability. Taking the case of an increase in the discount rate, two situations (doubtless there are many variants of these) may be distinguished to illustrate the possibilities.

First, if inflationary expectations were already widespread and quite firmly established, if the possibility of restrictive anti-inflationary action by the Federal Reserve had not adequately been taken into account in the formation of these expectations, and if there was widespread confidence that monetary policy was capable of bringing inflation promptly and firmly under control, then a rise in the discount rate heralding the onset of a vigorously anti-inflationary monetary policy might have a bearish effect on sales and price expectations and thereby cause cutbacks and cancellations of expenditure plans. In this case, the announcement effects would be helpful to the authorities.

Second, if the outlook was somewhat uncertain but shifting in an inflationary direction, if observers were aware of the Federal Reserve's concern about the situation and were waiting to see whether the System would act, and if—perhaps on the basis of past experience—it was felt that monetary policy (even though potentially effective) would take considerable time to be brought to bear effectively enough to check the inflation, then a rise in the discount rate might have a bullish effect by confirming the emerging view that the near-term outlook was inflationary. In this case the announcement effects would be destabilizing.

Similar alternative expectational reactions could be postulated in the case of a reduction in the discount rate for the purpose of stimulating business activity. Although it is difficult to generalize concerning such matters and the effects might differ considerably from one situation to another, the second of the possible patterns of reaction outlined above seems, in general, considerably more plausible than the first. That is, it seems likely that the announcement effects of discount rate changes on the expectations of businessmen may frequently be of such a nature as to weaken rather than strengthen the effectiveness of monetary policy. At the same time the actions of the Federal Reserve are only one of the factors—and ordinarily not a major one—on which business expectations are based, and it is therefore doubtful whether the announcement effects of discount rate changes are really very important one way or the other.

We may conclude that the "psychological" effects of discount rate changes on the domestic economy—like all expectational phenomena in economics—are highly uncertain and that the discount rate as a weapon of "psychological warfare" is of very dubious value to the Federal Reserve.

A change in the discount rate has traditionally been used as a "signal" by some countries in an entirely different connection. In time of balance of payments crisis, a sharp increase in the discount rate may be used to communicate to the rest of the world a country's determination to defend by whatever means may be necessary the external value of its currency. Britain has used discount rate changes for this purpose on occasion since World War

II, and this was a major reason why Canada abandoned the "floating discount rate" system (discussed below) and raised the rate to 6 percent at the time of the Canadian balance of payments crisis in June 1962. While a long tradition has perhaps made discount rate increases a reasonably effective means of international communication in some situations of this kind, there are surely other equally satisfactory means available; e.g., English, French, Latin, or Zulu.

C. Conclusions Concerning Present Discount Policy

The above analysis suggests that the discount rate as presently handled is not a very effective element in Federal Reserve policy. At times when a restrictive policy is applied, the induced increase in member bank borrowing constitutes a minor "leakage" in the controls, since it permits member banks to postpone contraction of their loans and investments and also adds to the total supply of member bank reserves. For the purpose of controlling the amount of borrowing, the Federal Reserve relies on adjustments in the discount rate, together with a tradition against borrowing that prevails among member banks and System surveillance of the borrowing practices of the banks. Due to the fact that open market interest rates fluctuate continuously while the discount rate is changed only at somewhat unpredictable discrete intervals, the relation between the discount rate and open market rates (which largely determines the incentive to borrow) behaves in a very erratic fashion. The System relies on "free reserves" as an immediate short-run guide for monetary policy; however, the restrictive effect of a given amount of free reserves varies with (among other things) the relation between the discount rate and the yields on assets—especially Treasury bills—that banks might alternatively liquidate to adjust their reserve positions.

Discretionary changes in the discount rate may at times have rather unpredictable effects on the business and financial situation, partly because it is often uncertain whether such changes are meant to be passive adjustments to keep the discount rate in line with other interest rates or whether they represent independent moves to tighten or ease credit. To the extent that changes in the discount rate do influence business conditions directly, they do so chiefly through psychological or "announcement" effects, the nature of which depends upon the kinds of expectations held by lenders, borrowers, and spenders. Although these announcement effects are quite complex and probably not of great importance in most cases, it seems likely that on occasion they may tend to increase economic instability.

D. Possible Reforms in Discount Policy

A number of students of monetary affairs have expressed discontent with the present discount policy of the Federal Reserve, although some of them have not made specific suggestions for a change.[39] However, at least three fairly specific proposals for reform have been suggested. Two of these would de-emphasize discount policy—one by getting rid of the discount mechanism entirely and the other by tying the discount rate to market interest rates and thereby eliminating discretionary changes in it. The third would move in the opposite direction by trying to reform the discount mechanism in such a way as to make the discount rate a much more powerful weapon of credit control. We shall discuss each of these proposals in turn.

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[39] See, for example, E. C. Simmons, "A Note on the Revival of Federal Reserve Discount Policy," *Journal of Finance*, XI, December 1956, pp. 413-31.

1. *Abolition of the discount mechanism*

The proposal has been advanced quite forcefully by Professor Milton Friedman that the discount mechanism should be abolished altogether.[40] Friedman argues that the legitimate function of the central bank is to control the stock of money and that the discount rate is an ineffective instrument for this purpose. Many of his arguments are similar to the ones set forth above, and his analysis was cited at several points in our discussion.

One difficulty with the complete elimination of discounting is that the discount mechanism serves a useful function as a "safety valve" by which banks are able to make adjustments in their reserve positions and the Federal Reserve is able to come to the aid of the banking system—or individual banks—in case of a liquidity crisis. In order to provide a means for individual banks to make short-run adjustments in their reserve positions, Friedman proposes the establishment of a fixed "fine" to be assessed on reserve deficiencies; the fine to be set high enough to be above likely levels of market interest rates, in order to prevent the device from becoming an indirect form of borrowing from the Federal Reserve.[41] As far as liquidity crises are concerned, he contends that, due to the success of deposit insurance in practically eliminating bank failures, such crises are now scarcely conceivable and that the "lender of last resort" function of the Federal Reserve is now obsolete, so that we need not worry about its elimination. It may be noted that if the discount mechanism were eliminated, it would be possible to use the repurchase agreement technique as a means of providing emergency assistance to the banking system in times of crisis.[42]

2. *Tying the discount rate to the Treasury bill rate*

An alternative to the complete abolition of borrowing would be to change the discount rate at frequent intervals in such a way as to maintain an approximately constant relation between it and some open market interest rate, such as the Treasury bill rate. For example, each week as soon as the average rate of interest on Treasury bills at the Monday auction became known, the discount rate could be adjusted so as to preserve a constant differential between the two rates.[43]

Under this arrangement, the discount

[40] Friedman, *A Program for Monetary Stability, op. cit.*, pp. 35-45; see also his testimony in *Employment, Growth, and Price Levels,* Hearings before the Joint Economic Committee, Part 9A, Washington: U. S. Government Printing Office, 1959, pp. 3019-28. A. G. Hart also suggested the possibility of abolishing discounting a quarter of a century ago in connection with a discussion of the 100 percent reserve plan; see his "The 'Chicago' Plan of Banking Reform," *Review of Economic Studies,* II, February 1935, pp. 104-16, reprinted in F. A. Lutz and L. W. Mints (eds.), *Readings in Monetary Theory,* Philadelphia: Blakiston Co., 1951, pp. 437-56.

[41] Friedman, *A Program for Monetary Stability, op. cit.*, pp. 44-45.

[42] This possibility was mentioned by Hart in connection with his suggestion for the elimination of the discount mechanism (*op. cit.*, p. 110 in original, p. 447 in *Readings in Monetary Theory*).

[43] See Smith, "The Discount Rate as a Credit-Control Weapon," *op. cit.* Friedman (*A Program for Monetary Stability, op. cit.*, p. 45) refers to such an arrangements as an alternative (albeit a less desirable one in his opinion) to complete abolition of discounting. He points out, quite correctly, that if the differential between the discount rate and the bill rate were made large enough, the plan would be equivalent to abolishing discounting. Professor J. M. Culbertson ("Timing Changes in Monetary Policy," *Journal of Finance,* XIV, May 1959, pp. 145-60, esp. 157-158) concludes with respect to discount policy that the Federal Reserve "should subordinate the discount rate by making adjustments in it routinely in response to changes in market rates and should seek a less ambiguous vehicle for such communication with the public as may be useful."

rate would no longer be a discretionary credit control weapon, and the unpredictable and often perverse announcement effects on the expectations of businessmen and financial institutions would be done away with. To the extent that the Federal Reserve wanted to influence expectations and felt that it could manage such effects so as to contribute to economic stability, it could implement these effects through the issuance of statements concerning its intentions, the economic outlook, and so on. While the present writer is rather dubious about the value of such activities, it is surely true that to the extent that they can contribute anything useful they can be handled better by verbal means than through reliance on such a crude signal as the discount rate.

The major question involved in the adoption of an arrangement for tying the discount rate to the bill rate would be the choice of the proper differential between the two. Obviously, the discount rate should be above the bill rate; beyond this the establishment of the differential is a matter of judgment. The larger the differential, the smaller would be (a) the average amount of borrowing and (b) the swings in borrowing that would occur as credit conditions changed. In view of the wide variations among individual banks with respect to both portfolio composition and expectations, the present writer feels that a fairly large differential of perhaps one percent would be desirable, in order to keep down the amount of borrowing, which, for reasons discussed earlier, represents a minor leakage in monetary controls. But there does not seem to be any analytical principle that provides a basis for selecting the proper differential. Doubtless the best procedure would be to experiment with various differentials, retaining each one long enough to observe its effectiveness.

Under this arrangement, in contrast to the complete elimination of discounting, the discount mechanism would continue to be available to serve as a means of making temporary adjustments in bank reserve positions and as a "safety valve" that could be used in times of crises. If this approach were adopted, it would probably be desirable to give up the efforts to rely on such an intangible and unreliable means of controlling discounting as the traditional "reluctance" of member banks and the so-called "surveillance" of the Federal Reserve, recognizing borrowing as a "right" rather than a "privilege" of member banks, and relying entirely on the discount rate (in relation to the bill rate) as a means of controlling it.[44]

A procedure of the kind discussed above was employed in Canada from November, 1956, to June 1962. During this period, the Bank of Canada adjusted its lending rate each week so as to keep it ¼ of 1 percent above the average rate on treasury bills at the most recent weekly auction. The reasons given for adopting such an arrangement in 1956 were similar to those set forth above.[45] The policy was abandoned at the time of the Canadian balance of payment crisis in June 1962, when, as part of a program for dealing with the crisis, the discount rate was raised to 6 percent as a signal to the rest of the world of Canada's determination

[44] In this connection, Friedman (*A Program for Monetary Stability, op. cit.*) says: "If rediscounting is retained, it should be a right, not a privilege, freely available to all member banks on specified terms." It appears that Friedman exaggerates the amount of discretion exercised by the System with respect to lending to individual banks, although the views expressed by System officials, concerning the "administration of the discount window"—such as Roosa's attempt ("Credit Policy as the Discount Window: Comment," *op. cit.*, pp. 333-34) to draw a distinction between saying "No," and refusing to say "Yes"—are so ambiguous that it is very difficult to judge the amount of discretion employed.

[45] See Bank of Canada, *Annual Report of the Governor to the Minister of Finance*, 1956, pp. 45-46.

to defend the external value of the Canadian dollar.[46] The traditional discretionary discount rate policy has been employed in Canada since that time.

3. *Increasing the effectiveness of the discount rate*

A proposal for reform of the discount mechanism very different from the two discussed above has recently been advanced by Professor James Tobin.[47] Instead of dismantling the discount mechanism entirely or abolishing discretionary changes in the discount rate, Tobin would greatly increase the importance of the rate and turn it into a major weapon of credit control.

The Tobin proposal calls for two changes in present procedures:

1. The Federal Reserve would pay interest at the discount rate on member bank reserve balances in excess of requirements.

2. The prohibitions against payments of interest on demand deposits and the ceilings on the payment of interest on time and savings deposits would be repealed.

These changes would greatly increase the leverage of the discount rate by making it an important consideration for banks that are not in debt to the Federal Reserve as well as for those that are. The opportunity cost to a bank of increasing its loans and investments would be the return it could earn by holding excess reserves, and this cost would be firmly under the control of the Federal Reserve. Moreover, the interest rate offered by the banks to holders of idle deposits would presumably be linked rather closely to the rate paid on excess reserves, since the bank could always earn a return on its deposits at least equal to one minus its reserve requirement times the discount rate. Thus, if the Federal Reserve wished to tighten credit, it could raise the discount rate, and this would increase the opportunity cost of lending for all of the member banks (whether they were in debt or not) and would, therefore, make them willing to lend only at higher interest rates than previously, while at the same time causing the banks to raise interest rates on deposits, thereby increasing the attractiveness of bank deposits relative to other assets on the part of the public.[48] The discount rate could be used independently to control credit,

[46] See Bank of Canada, *Annual Report of the Governor to the Minister of Finance*, 1962, pp. 3-4 and 72-73.

[47] James Tobin, "Towards Improving the Efficiency of the Monetary Mechanism," *Review of Economics and Statistics*, XLII, August 1960, pp. 276-79.

[48] Allowing the banks to pay interest on deposits would have two related advantages. One is that it would probably reduce the propensity for the velocity of deposits to increase when a restrictive policy was applied, since the banks would be able to raise interest rates on deposits making them more attractive and weakening the tendency for rising interest rates on other claims to induce shifts of deposits into the hands of persons having a high propensity to spend. The other advantage is that it should reduce the amount of real resources devoted to the task of economizing the use of cash balances. Since the revival of flexible monetary policy, many large corporations, as well as state and local governments, have developed extensive facilities for handling short-term investments in order to minimize their holdings of sterile cash balances, and the amount of skilled personnel devoting its time to this kind of activity at present is certainly not trivial (see C. E. Silberman, "The Big Corporate Lenders," *Fortune*, August 1956, pp. 111-114, 162-70). Resources devoted to this purpose represent a form of economic waste, since the real cost of creating deposits is virtually zero so that there is no economic gain from exercising economy in their use. This is pointed out by Tobin and is emphasized even more strongly by Friedman (*A Program for Monetary Stability*, *op. cit.*, pp. 71-75). The two advantages (reducing destabilizing velocity changes and discouraging efforts to economize in the use of costless deposits) are related in the sense that the propensity to waste resources in economizing cash balances tends to increase during periods of credit restriction and rising interest rates, and this increased application of resources helps to permit a destabilizing rise in velocity.

or it could be combined with open market operations. It is not clear, however, what principle should govern the division of responsibility between the two weapons.

The proposal is ingenious and would certainly be practical and capable of being put in operation without causing disruption. And it might have the incidental advantage that the payment of interest on excess reserves might encourage more banks to become members of the Federal Reserve System. What is not clear, however, is why a flexible monetary policy could be implemented more effectively by means of the discount rate under this proposal than is now possible by means of open market operations. It is true that the proposal would presumably permit the Federal Reserve to control the cost of bank credit very effectively, but this can already be done—in principle at least—by open market operations. In part, the problems of monetary policy seem to stem from the fact that the demand for bank credit is not very sensitive to changes in interest rates and other monetary variables, so that it has proved to be difficult to operate forcefully enough to produce prompt changes of the degree necessary for effective stabilization. Perhaps it would be possible to bring the forces of monetary policy to bear more rapidly by means of the Tobin proposal, but this is by no means obvious. If the proposal merely provides another way of doing what is already possible, it hardly seems worthwhile.

The repeal of the existing restrictions relating to payment of interest on deposits is in no way dependent upon provision for the payment of interest on excess reserves, and there is much to be said for the repeal of these restrictions, even if the remainder of the Tobin proposal is not adopted.

4. *Conclusions*

Of the three proposals for reforming the discount mechanism, the present writer feels that the strongest case can be made for the procedure of changing the discount rate each week in such a way as to maintain a constant spread between the discount rate and the Treasury bill rate. This would be a less drastic reform than the complete elimination of discounting, would eliminate the unpredictable effects of discretionary changes in the discount rate, would preserve the discount mechanism as a safety valve, and would eliminate the effects on credit conditions that now result from erratic variations in the relation between the discount rate and open market rates. The Tobin proposal for increasing the potency of the discount rate as a credit-control weapon is worthy of careful study, but it is not yet clear that the proposal would greatly strengthen the hand of the Federal Reserve.

If the present system of making discretionary adjustments in the discount rate at irregular intervals is retained, it would be desirable to reform the administration of the discount mechanism, perhaps by shifting the authority for making changes in the rate from the individual Reserve banks to the Federal Open Market Committee. The purpose of such a change would be to reduce the number of persons involved in decisions regarding the discount rate so that it would be easier to agree on the reasons for making changes. This would facilitate the issuance of explanatory statements at the time changes are made, in order to eliminate the confusion that often results due to the varying interpretations that are frequently placed on rate changes in the absence of explanations. It should then be feasible to make more frequent technical adjustments in the rate with less need to worry about the danger of disruptive effects on the credit situation, thereby permitting closer co-ordination of the discount rate with open market operations.

IV. *The Role of Variable Reserve Requirements* [49]

Since the accord with the Treasury in March, 1951, the Federal Reserve has made no systematic anti-cyclical use of changes in member bank reserve requirements. Reductions in the reserve requirement percentages applicable to demand deposits were made in the recessions of 1953-54 (reductions in July 1953, and June-August 1954) and 1957-58 (reductions in February-April 1958). In the recession of 1960-61, reserves were released by permitting member banks to count vault cash as reserves—to a limited extent beginning in December 1959, and without limitation beginning in November, 1960. And, finally, reserve requirements applicable to time deposits were reduced from 5 to 4 percent in October-November 1962, at a time when output was expanding but unemployment remained high.

Under present provisions, the Board of Governors can change requirements on demand deposits between 10 and 22 percent for reserve city banks and between 7 and 14 percent for country banks, while it can change requirements on time deposits between 3 and 6 percent; as this is written (July 1963) the requirements are 16½ percent and 12 percent for demand deposits at reserve city and country banks, respectively, and 4 percent for time deposits.[50] The Board may permit member banks to count all or part of their vault cash as required reserves; at the present time vault cash may be counted in full.

A. Variable Reserve Requirements As A Credit Control Weapon

A change in reserve requirements alters both the amount of excess reserves available and the credit expansion multiplier, which determines the amount of potential credit expansion per dollar of excess reserves. For relatively small changes in reserve requirements, the first of these effects is much more important than the second—with net demand deposits amounting to roughly $100 billion, a reduction of one percentage point in requirements releases approximately $1 billion of excess reserves.

However, changes in reserve requirements have harsh and rather indiscriminate effects, at least when the changes made amount to as much as one-half or one percentage point, as has been customary in recent years. This does not cause serious problems in the case of reductions in requirements, because, as explained below, excessive bank liquidity generated by such reductions can be—and in practice has been—sopped up by open market sales of securities. Increases in requirements, however, have troublesome side effects which are not quite so easily dealt with.

Increases in requirements affect all banks—or at least all the banks in a particular reserve requirement classification—including some banks that are plentifully supplied with liquid assets which permit them to make easy adjustments in their reserve positions, as well as banks whose liquidity positions are less comfortable. To the extent that banks are forced to carry out troublesome portfolio readjustments, they are able to see clearly that these adjustments were forced upon them by Federal Reserve action; whereas the adjustments resulting from open market operations are either voluntary or, to the extent that they are involuntary, appear to be the result of impersonal market forces. Thus, frequent reserve requirement increases are likely

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[49] Much of the discussion in this section is based upon the author's study entitled "Reserve Requirements in the American Monetary System," in *Monetary Management*, prepared for the Commission on Money and Credit, Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963, pp. 175-315.

[50] Under legislation passed in July 1959, the "central reserve city" classification of member banks was eliminated effective July 28, 1962.

to cause resentment among member banks and, under present conditions, might even be a significant deterrent to membership in the Federal Reserve System. Moreover, while the initial effect of reserve requirement increases is felt by all the banks, it is likely that there will be substantial secondary effects which will be concentrated on banks in the larger money centers as interior banks draw down correspondent balances and sell Government securities in the central money market in order to restore their reserve positions.

B. Co-ordination of Reserve Requirement Changes and Open Market Operations

To some extent, it is possible to soften the unduly harsh impact of changes in reserve requirements by proper co-ordination with open market operations. The open market operations associated with the mid-1954 reductions in reserve requirements, which were designed to encourage continuing recovery from the recession of 1953-54, provide a good example of this co-ordination. The reserve requirement reductions that were made resulted in the injection of what the Federal Reserve authorities felt was an unduly large amount of excess reserves within a short period of time.[51] Accordingly the Federal Reserve sold securities in the open market at about the same time the reserve requirement reductions were made, in order to absorb a portion of the released reserves: then, over a period of several months, it purchased securities in order to feed reserves back into the economy at times when additional reserves appeared to be needed in the interest of orderly recovery.[52] Thus, a skillful blending of reserve requirement changes and open market operations produced a smooth and gradual adjustment.

Similar recent examples of the use of open market operations to soften the impact of reserve requirement increases during periods of inflation are not available, since the Federal Reserve has not made use of reserve requirement increases since the Accord.[53] The blending of open market operations with reserve requirement adjustments would probably not result in quite such a smooth adjust-

[51] In a succession of changes in June, July, and August, 1954, demand deposit reserve requirements were reduced by 2 percentage points at central reserve city banks and 1 percentage point at reserve city and country banks, while time deposit reserve requirements were reduced by 1 percentage point at all classes of banks. These adjustments released about $1.5 billion of reserves.

[52] Between June and August 1954, the Federal Reserve reduced its holdings of Government securities (average of daily figures) by $1.0 billion, while the net effect of factors outside the control of the Federal Reserve was to reduce member bank reserves by another $200 million. Thus, total reserves declined by $1.2 billion, and required reserves fell by the same amount, leaving excess reserves unchanged. From August to December 1954, the Federal Reserve increased its portfolio of Government securities by $0.9 billion as it fed reserves back to the banking system to meet seasonal demands. (Calculations based on data from *Federal Reserve Bulletin*, February 1955, p. 149.)

[53] During the immediate postwar inflation in 1948 while the Federal Reserve was "pegging" the market for Government securities, reserve requirement increases were used on several occasions in an effort to implement a policy of credit restraint. In this situation, however, member banks were plentifully supplied with Government securities, which were saleable at virtually fixed prices. Consequently, the banks tended merely to sell more securities than they otherwise would have sold, and these securities had to be purchased by the System to prevent securities prices from falling. Thus, banks were able to replenish their reserves readily, and there was little effect on the cost or availability of credit. In this situation, open market purchases were, in effect, used to offset more or less permanently the effects of reserve requirement increases. Such operations did tend to reduce bank liquidity somewhat, since the banks were giving up liquid securities for less liquid required reserves; however, the operations were not on a sufficiently large scale to make this a significant factor.

ment in this case, because the problem here is not only to prevent an unduly sharp impact on the total supply of money and credit, but to alleviate harsh impacts on individual banks. Since some banks which were squeezed especially hard might not possess securities of the maturities being purchased by the System, these banks might not be helped directly by open market operations.

If reserve requirement changes have important advantages as a means of controlling credit, the technical difficulties in making two-way adjustments could be greatly reduced by making smaller changes in the requirements than have been customary in the past and by smoothing the impact by means of open market operations. It has been suggested that more frequent and smaller changes be made, and there is no technical reason why this could not be done.[54] And if more frequent use of reserve requirement changes would clearly permit the Federal Reserve to conduct monetary policy more efficiently than would otherwise be possible, the fact that such adjustments might be somewhat unpopular with commercial bankers should not be taken too seriously. The real question is: What advantages do reserve requirement adjustments have in comparison with other credit-control weapons, especially open market operations? To this question we now turn.

C. Possible Usefulness of Reserve Requirement Changes

Under most circumstances, the effects of (for example) expanding credit by lowering reserve requirements will almost surely be different in detail from those produced by the same amount of expansion (measured in terms of the increase in income-generating expenditures) produced by open market purchases. That is, the spending units which will be induced to increase their expenditures will be different in the two cases, as will the types of expenditures affected. Unfortunately, however, our knowledge of relative "incidence" of the two weapons is very poor, so that, while we may be sure that there are differences, there is very little that can be said about them. For this reason, we can scarcely even discuss intelligently the "mix" of the two that should be used to accomplish particular objectives. The best we can do is to indicate some rather general considerations which differentiate reserve requirement adjustments from open market operations and some special situations in which the reserve requirements weapon may be especially appropriate.

1. *Neutrality*

The Federal Reserve authorities in recent years have shown a strong antipathy toward selective credit controls and have taken the position that the central bank should confine its efforts to the control of the total supply of money and credit, leaving the task of allocating credit to market forces. This attitude has been reflected, for example, in the System's opposition to the establishment of consumer credit controls even on a stand-by basis. Although there are other considerations involved also, this philosophy seems to be one of the bases for the Federal Reserve's adherence to the "bills-only" policy between 1953 and 1961. During this period, the System carefully eschewed efforts to control the maturity structure of interest rates, leaving this to the determination of market forces.

If such a philosophy of "neutrality" were to be pushed to its logical conclusion, it would lead to reliance on reserve requirement adjustments as a means of monetary control. Even bills-only is not

[54] See C. R. Whittlesey, "Reserve Requirements and the Integration of Credit Policies," *Quarterly Journal of Economics*, LVIII, August 1944, pp. 553-70.

entirely neutral in its effects on the interest rate structure, since changes in the money stock produced by this method involve, as a by-product, changes in the stock of securities of a particular maturity (namely, Treasury bills) and have a special impact on short-term interest rates. Reserve requirement changes, on the other hand, have no direct effects on interest rates or on stocks of securities—all such effects are produced by the decisions and activities of borrowers and lenders (including commercial banks).

The "neutrality" argument for reliance on reserve requirement changes would carry weight only with those who accept the "neutrality" philosophy. Moreover, its implementation would require that all monetary adjustments be accomplished by reserve requirement changes. This would include the day-to-day operations of the Federal Reserve designed to counteract the effects of uncontrollable factors (float, currency in circulation, etc.) affecting member bank reserves. These operations seem clearly to serve a useful, if not indispensable, function in keeping the money market on an even keel and are now quite efficiently carried out by means of open market operations. While it would undoubtedly be possible to make smaller and more frequent adjustments in reserve requirements than have been employed in the past, it would surely be wholly impracticable to employ reserve requirement changes on a day-to-day basis. For this, as well as other reasons, the "neutrality" argument for the use of reserve requirement adjustments appears to be purely academic and of no practical importance.

2. *Announcement effects*

Like discount rate adjustments and unlike open market operations, changes in reserve requirements are overt actions of the Federal Reserve which are widely reported and commented upon in the press. As such, they are likely to have "announcement effects" through their influence on the expectations of businessmen and financial institutions. In fact, it seems quite likely that the reductions in reserve requirements that were made in 1953 and 1958 were motivated partly by a desire to convince the public that the System intended to take vigorous anti-recession action.

The question of announcement effects was discussed at some length in connection with discount rate changes, and the conclusion of that discussion was that such effects are uncertain and unpredictable. This conclusion seems to apply also to reserve requirement changes. For example, it seems at least as plausible to suppose that a dramatic reduction in reserve requirements in the early stages of a recession will strengthen the feeling that business conditions are worsening, as to suppose that it will make people optimistic by showing that the Federal Reserve is actively on the job trying to maintain stability.

I believe the fact that reserve requirement changes tend to have announcement effects is a disadvantage rather than an advantage. The best way to produce announcement effects—if and when such effects seem likely to be desirable—is by means of carefully-worded public statements explaining the views or intentions of the authorities. Action and communication should, in general, be carefully separated rather than rigidly linked together.

3. *Speed of reactions*

It has been argued that reserve requirements changes have more widely diffused effects than open market operations and therefore may affect economic conditions more promptly. The reasoning behind this argument is that open market operations are consummated in the central money market of the country in New

York and therefore have their initial impact chiefly on the reserve positions of the money market banks. Effects are gradually diffused throughout the country, primarily by means of interregional flows of funds set in motion by the adjustments of these banks to the initial changes in their reserve positions—a process which takes some time to carry through. Reserve requirement changes, on the other hand, instantaneously affect the reserve positions of all banks and therefore produce more rapid effects on credit conditions outside the central money markets. Federal Reserve officials apparently accept this argument and think it is especially relevant with respect to anti-recession policies, since Chairman Martin of the Board of Governors has used it to explain why the System used reserve requirement reductions as a means of attacking the recessions of 1953-54 and 1957-58.[55]

One study covering the period from mid-1951 to mid-1953, when the Federal Reserve relied on open market operations to tighten credit rather gently at first and then with increasing intensity, suggests that the effects were felt first in New York and that there were noticeable lags in their transmission to the rest of the country.[56] The free reserve position of central reserve city banks appears to have been affected earlier and more strongly than that of other banks, and New York City banks showed an earlier and more pronounced tendency to shift the composition of their portfolios from investments to loans than did banks outside New York City. The author of this study suggests more frequent use of changes in reserve requirements, in order to shorten the lags in the regional transmission of monetary policy.

While this study is somewhat suggestive, it is not clearly convincing, since the statistical series involved are so ragged in their behavior as to be difficult to interpret, and because one cannot be sure that such differences in regional reactions as were present were not due to factors unrelated to monetary policy. There are several reasons for doubting whether the difference in the reaction speeds of the two weapons is great enough to be an important consideration. In the first place, as noted above, while the initial impact of reserve requirement changes is widely diffused, adjustments of interior banks via changes in correspondent balances and security transactions are likely to pass a disproportionate share of it back to the central money markets. Furthermore, to the extent that the initial effects of open market operations are more concentrated, the fact that central money market banks are very sensitive to changes in their reserve positions and prompt in reacting thereto would suggest that the transmission of effects to other parts of the economy is likely to get under way quickly and proceed rapidly. And finally, the other lags in monetary policy appear to be so long that it is doubtful whether such differences as do exist between the two weapons are of appreciable importance in the overall picture. In fact, one cannot even be sure that there is not frequently some advantage in open market operations, because commercial banks all over the country adjust their reserves through sales of securities (which largely clear through the central money market) so that purchases (for example) of securities may have some tendency to direct the flow of new reserves to the points where they are most needed, instead of

[55] See Martin's testimony in *January 1960 Economic Report of the President*, Hearings before the Joint Economic Committee, 86th Congress, 2d Session, Washington: U. S. Government Printing Office, 1960, pp. 163-212.

[56] I. O. Scott, Jr., "The Regional Impact of Monetary Policy," *Quarterly Journal of Economics*, LXIX, May 1955, pp. 269-84.

scattering them indiscriminately over the map.[57]

4. *National emergencies*

One circumstance in which the power to raise reserve requirements might be used to good purpose is in times of a war or major national defense emergency, which requires the expenditure of large amounts of borrowed funds by the Government during a period of full employment. Under such conditions, there is much to be said for the Treasury's obtaining such funds as it needs but cannot raise through taxation or through borrowing from the nonbank public by selling securities directly to the Federal Reserve, with the System raising reserve requirements to immobilize the excess reserves that are created when the Treasury spends the money. This process would avoid the accumulation of excessive liquidity in the hands of the commercial banks and the accompanying threat of post-emergency inflation and would save the Treasury some interest costs. It would, of course, require that the Federal Reserve be given virtually unlimited power to raise reserve requirements.

5. *Conclusions*

The upshot of the above discussion is that there appear to be few if any circumstances in normal times when reserve requirement changes are clearly superior to open market operations as a means of controlling credit. Reserve requirement changes have "announcement effects" while open market operations do not, but these may frequently turn out to be a nuisance rather than an aid to the Federal Reserve and, to the extent that they are desirable, can be produced more effectively by other methods. Conceivably, reserve requirement changes may affect business conditions more promptly than open market operations; however, this is not certain, and in any case the advantage is unlikely to be great enough to be of much significance. In view of the superior administrative efficiency of the open market operations, together with the unpopularity among commercial bankers of frequent two-way adjustments of reserve requirements, there is much to be said for relying exclusively on open market operations under normal circumstances.[58]

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[57] Chairman Martin of the Board of Governors has stated his belief that an increase in reserve requirements would be the best way to offset the effects on member bank reserves of a substantial gold inflow, if circumstance required such offsetting (see his testimony in *January 1960 Economic Report of the President*, Hearings before the Joint Economic Committee, *op. cit.*, p. 187). Perhaps this would be true in some circumstances, but the present writer is inclined to believe that open market sales of securities might often be the more appropriate weapon for this purpose, since the funds resulting from the sale of gold to the Treasury by foreign governments are often likely to find their way to the central money market, so that the way to offset the effects of these flows with the minimum impact on domestic business activity might be through the sale of Treasury bills, which would, in the main, withdraw funds from the central money market.

[58] Another issue that has come up recently relating to the choice between open market operations and reserve requirement changes is the differing effects that these two weapons have on the Treasury's interest costs and on the profits of commercial banks. For example, the creation of a given amount of additional money by open market purchases will result in lower costs to the Treasury and lower profits to the banking system than would the creation of the same amount of money by lowering reserve requirements. (For an extensive discussion, see Smith, "Reserve Requirements in the American Monetary System," *op. cit.*, pp. 216-49.) However, this matter is relevant chiefly in connection with long-term developments related to the choice between open market purchases and reserve requirement reductions as alternative means of providing reserves to support the secular growth of the money supply. It has little bearing on the relative merits of the two weapons as alternative means of producing two-way anti-cyclical changes in credit conditions.

V. *Concluding Comments*

As they are used at the present time, open market policy, discount policy, and reserve requirements policy are three instruments of monetary control with essentially a single purpose—the regulation of the total supply of money and bank credit. Open market policy is powerful, effective, and administratively flexible; it is unquestionably the key weapon of general monetary control. Discount policy, as reflected in changes in the discount rate, has a weak and to some extent even perverse effect on the total supply of money and credit and is, at the same time, a rather inept and confusing device for waging "psychological warfare" against economic instability via the public's expectations. Reserve requirements policy is a powerful weapon but too cumbersome for frequent use and not clearly capable of accomplishing anything under ordinary circumstances that cannot be done at least as well by means of open market operations.

Doubtless the three weapons have somewhat different economic effects; however, detailed knowledge of the impact of monetary changes is inadequate to permit a meaningful differentiation. Consequently, it is not possible to specify the circumstances in which one of these weapons rather than the others should be used. They are all designed to serve the same purposes—one effectively and the other two rather ineptly.

Accordingly, I would favor placing complete reliance on open market operations, under ordinary circumstances, as the means of conducting general monetary policy. The best way of handling the discount rate would probably be to tie it to the Treasury bill rate as explained earlier in this paper. Reserve requirements should probably be fixed at an appropriate level and kept there.[59] I would also favor the elimination of the present threefold classification of banks for reserve requirement purposes and the establishment of uniform reserve requirements for demand deposits at all banks, including nonmember banks. There does not appear to be any logical basis for differentiating among banks as far as reserve requirements are concerned, and uniform requirements would increase somewhat the precision of open market policy as a means of controlling the total supply of money and bank credit.[60]

There may be circumstances under which the Federal Reserve should try to affect economic activity by influencing the public's expectations, although this is clearly a tricky and possibly even dangerous form of activity. To the extent that it is employed, it should be divorced from actions designed to control bank reserves and should take advantage of the subtleties of everyday language. One of the advantages of open market operations is that they are necessarily being carried out continuously and are largely devoid of so-called "announcement effects."

One final question should perhaps be raised: Does not the situation of the last three years or so when monetary policy has had to be directed simultaneously at stimulation of the domestic economy and protection of the balance of payments against excessive outflows of short-term capital argue for the retention of all of the traditional credit control weapons, in order to maximize the flexibility of the monetary authorities? I do not believe so. It is true that, for example, by lowering reserve requirements and simultaneously selling enough Treasury bills to keep the bill rate from falling, the authorities could presumably stimulate the

[59] The question of what is the "appropriate" level of reserve requirements is beyond the scope of this paper and, in any case, is a matter of judgment. It is in connection with this question that the effects of reserve requirements on bank profits and Treasury interest costs referred to in footnote 58 become relevant.

[60] *Ibid.*, pp. 175-99.

domestic economy to some extent without increasing outflows of short-term capital. But such a result could equally well be brought about by requisite purchases of longer-term securities combined with sales of bills. It is difficult to see that adjustments in reserve requirements and the discount rate give the authorities any ability to change the structure of interest rates and the total credit supply that could not equally well be accomplished by sufficiently flexible use of Federal Reserve open market and Treasury debt management operations.

► C. R. WHITTLESEY

Federal Reserve Policy: Disclosure and Nondisclosure[1]

The discussion that follows is primarily concerned with the problem of how much and how promptly information on matters relating to central banking policies and operations should be made available to the public. The problem, it may be remarked, is not unrelated to broader issues of the place of free speech and free and informed markets in a system of free enterprise.

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[1] Assistance from various experts, academic and nonacademic, is gratefully acknowledged. Among those who can be named, I am particularly indebted to Professor A. Jerome Clifford, S.J., of John Carroll University and Profesor Ervin Miller of the University of Pennsylvania.

The liberal position on the basic issue of public disclosure has been stated by *The Economist* of London in terms which would seem to apply not only to the press but to all sources of public information:

> It is right and necessary that the press in general and journalists individually should take their stand against authority whenever their proper duty to the public impels them to do so. Their ground is the duty to inform, which is simply *the right of citizens to know. The indispensable corollary is that they should in fact inform their readers not only about what goes wrong but also about all that goes on, so that judgments can be freely made by all who read them.*[2]

The actions of central bankers and, to some extent and in some countries, even

[2] March 23, 1963, p. 1086. Italics supplied.

statistical data relating to routine banking operations have been regarded as matters to be shrouded in secrecy. In England, which stands as the fountainhead of central banking traditions no less than of democratic principles and precedents, reticence on matters relating to central banking had been carried to extremes. The result was that data which are assumed as a matter of course in the United States were unavailable or had to be ferreted out by sleuthing tactics. This attitude came under sharp attack from the Radcliffe Committee in 1959, and now considerably fuller reporting of banking data is currently provided.

Despite occasional steps to compel disclosure, of which more will be said presently, the view that central bankers have prior rights to withhold information from the public has for the most part been left unchallenged by economists and other students of central banking. To say that this applies in the United States is not to overlook the abundance of statistical information regularly made available through the annual reports of the Board of Governors and the respective Federal Reserve Banks, as well as in their monthly publications, or that provided through the Federal Deposit Insurance Corporation and other channels. Special reports on a wide variety of topics appear from time to time. And over the years a great deal of information has been elicited through Congressional hearings.

Since 1956 the most important continuing source of information has been the report of actions taken by the Federal Open Market Committee, together with the votes cast by members, as given in the annual reports of the Board of Governors. The executive committee of the F.O.M.C. was abolished in June of that year. Since then the Committee, meeting at frequent intervals, has not only been the locus of policy determination, but has become a forum for the discussion of all aspects of monetary policy.[3] The limitations remain that the reports of these sessions are less informative than they might be, and in any case reach the public with a time lag that may vary from under three to over eighteen months.[4]

These developments have contributed greatly to our knowledge of central banking and, in the sense of providing historical background at least, to our understanding of contemporary central banking policy. None of them, however, has seriously invaded the tradition that central bankers (in this instance, the officials of the Federal Reserve) should have the right to disclose as little information as they see fit, with respect to *current* policies.

Disclosure, as used here, is a relative term. It does not mean that every incidental note or random comment that precedes the formulation of a policy statement has to enter the public domain. Nor does it suggest, for example, that an increase in the discount rate, which must often go into effect uniformly and after having been agreed upon by a considerable number of officials, should be made public in advance of the authorized date. Similarly, with respect to decisions involving other central banks. It does imply, rather, that the practice of issuing releases on current activities such as ordinarily prevails at other government offices would apply also at the central bank.

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[3] C. R. Whittlesey, *Lectures on Monetary Management*, (Bombay: University of Bombay Press, 1960), pp. 23-25; and C. R. Whittlesey, "Power and Influence in the Federal Reserve System," *Economica*, February 1963, pp. 33-44.

[4] An apparent effort partially to overcome these limitations was made while the present article was being written. A detailed study of the actions of the Committee during 1962, prepared by Mr. Robert W. Stone, Vice President of the Federal Reserve Bank of New York and Manager of the Open Market Account, appeared as a supplement to the April issue of the *Monthly Review* of the Federal Reserve Bank of New York and in the *Federal Reserve Bulletin*, April 1963, pp. 429-57.

What is specifically suggested, for example, is that F.O.M.C. decisions, which are published during the following year, could usefully be announced at the time they are made. Typical of such statements are the following, all taken from the Annual Report of the Board of Governors for 1956:

> The Committee found less exuberance in the economic situation . . . but still believed that the basic economic factors were expansionary.
>
> It was felt that operations should not be modified materially until the current Treasury financing had been completed, but it was suggested that additional actions toward restraining credit expansion would more than likely be needed shortly.
>
> The Committee did not intend an overt change away from a policy of restraint.

It is further suggested that it would also be helpful if the authorities were to include, to the extent that considerations of time and space made feasible, some indication of the evidence and reasoning upon which their decisions were based.

I. *Federal Reserve Policy on Disclosure*

Official United States policy on the disclosure of information is formulated under the terms of the Administrative Procedure Act which was passed in 1946, in order, as stated in the subtitle, "to improve the administration of justice by prescribing fair administrative procedure." [5] Each agency, of which the Board of Governors and its affiliated parts are one, was instructed to publish statements as to the places and the methods whereby the public may secure information. This authorization was qualified, however, by the blanket reservation, "except to the extent that there is involved any function of the United States requiring secrecy in the public interest." [6]

The amended rules of the F.O.M.C., effective April 17, 1962, provide that:

> No person shall disclose, or permit the disclosure of, any unpublished information of the Committee to anyone, whether by giving out or furnishing such information or copy thereof, by allowing any person to inspect, examine or copy such information or copy thereof, or by any other means. Unpublished information of the Committee shall include all information concerning the proceedings, deliberations, discussions, and actions of the Committee and all information or advice coming to the Committee or to any member of the Committee, the Board of Governors of the Federal Reserve System, or any Federal Reserve Bank in the performance of duties for, or pursuant to the direction of, the Committee, whether contained in files, memoranda, documents, reports, books, accounts, records, or papers or otherwise acquired and whether located at the offices of the Board of Governors of the Federal Reserve System, the Federal Reserve Banks, or elsewhere . . .[7]

This statement directly relates, of course, to the F.O.M.C. only. Since, however, that body is the sensitive policy making unit of the Federal Reserve System and is made up of key officials of the system, the statement may be regarded as expressing the official Federal Reserve attitude, as well as actual policy, with respect to disclosure. The reasons advanced in support of nondisclosure are examined below.

II. *Congressional Efforts to Compel Disclosure*

The activities of Congressional committees and particularly of individual Representatives and Senators, among

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[5] *The Federal Reserve Act* (as amended through December 31, 1956), Board of Governors, Washington, pp. 271-73.

[6] And the further exception of "any matter relating solely to the internal management of an agency." *Ibid.*, p. 272.

[7] *Federal Reserve Bulletin*, June 1962, p. 692.

whom Representative Patman has been, by all odds, the most indefatigable, have contributed greatly to expanding public knowledge of central banking affairs. At times, the methods used have been needlessly time consuming and burdensome, and occasionally they have been harassing to the point of vindictiveness. But there can be little doubt that they have contributed substantially to making relevant information on central banking policy more readily available, in terms of both amount and timeliness, than it would otherwise have been or than is generally the rule in other countries.

An incident in the forcing of disclosure was the publication, as part of the official record, of what Senator Douglas later called "the very spicy exchange of correspondence" [8] between the Treasury and the Board of Governors prior to the Treasury-Federal Reserve Accord of March 1951. According to Senator Douglas:

> Mr. Martin at that time was very reluctant to have those documents brought forward, but they were published, and I think they contributed greatly to an understanding of the monetary history during the period 1950–51. Now, since those documents were published, I think they did, in general, help everybody.[9]

This experience was drawn upon as justification for demanding publication of the report of the so-called Ad Hoc Committee in 1954. In the latter instance the issue related to a controversy within the Federal Reserve System. And this time it found Governor Martin receptive to the enforced disclosure, an inconsistency relative to his earlier stand which is the more understandable in view of the fact that the report in question supported the position taken by Mr. Martin in opposition to that of Mr. Sproul, then President of the Federal Reserve Bank of New York.[10]

The report in question had been prepared as a working paper for the guidance of the F.O.M.C. and for internal use by the Committee alone. The subject was discussed in the report with a freedom which quite certainly would not have obtained if publication had been contemplated at the time. It was Mr. Sproul's contention that "it would be a bad precedent if we began publishing working papers of the committee, inhibiting and corroding free discussion within the committee." [11] Among other less pertinent considerations, Mr. Sproul mentioned that the report contained "a lot of deadwood" and did not have the unanimous acceptance of the F.O.M.C.[12] And he further added:

> The minor clamor for publication of the ad hoc committee report . . . has come mostly from the curious, or those who think they see a chance of stirring up trouble within the System, or between the System and the Congress. I would not pander to that curiosity, or to the decisive [divisive?] urge.[13]

Release of the Ad Hoc Committee report received support from other members of the F.O.M.C. including Governor Vardaman and President Bryan of the

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[8] *United States Monetary Policy: Recent Thinking and Experience*, Hearings before the Subcommittee on Economic Stabilization of the Joint Committee on the Economic Report, December 6 and 7, 1954, (Washington: Government Printing Office, 1954), p. 251.

[9] *Ibid.*

[10] The particular issue, it may be observed, related to the adoption of the bills-only policy. The stand taken on this question by Mr. Sproul had the support of a large proportion of professional economists and was seemingly vindicated by official renunciation of the policy some years later.

[11] *United States Monetary Policy, op. cit.*, p. 252.

[12] He argued that to complete the record all other letters and documents commenting on the report by members of the F.O.M.C. would have to be published.

[13] *Ibid.*

Federal Reserve Bank of Atlanta. The latter expressed his support in terms that would seem to strike at the roots of the whole policy of nondisclosure:

> We have had here a most fundamental attack upon the policy of the System. I believe that this committee [the Joint Committee on the Economic Report] deserves the whole history out of which that policy was evolved.[14]

And Senator Douglas delivered a similarly far-reaching and unqualified endorsement of the rule of full disclosure:

> I think the publication of this document would be of some assistance. In short, I believe that the Federal Reserve, the Open Market Committee, should not conduct their operations with the secrecy which has previously attended them, that the more we have an airing of differences on these matters, the better educated Congress and the public will be, that sunlight is not to be feared, that honest differences are not to be feared, and that there is nothing quite like facts and knowledge.[15]

It is by no means to be assumed that either President Bryan or Senator Douglas would agree, at some future date, to a strict interpretation of the sentiments so categorically stated at this time.

In the end, the supporters of disclosure prevailed and the controversial report of the Ad Hoc Committee was published.

A further incident in the intermittent attack on nondisclosure came partially to view in the summer of 1962. As mentioned earlier, the actions of the F.O.M.C., together with the votes cast by different members, are recorded in the annual reports of the Board of Governors. While reasons for actions taken are given in the report, as required by Congress, they are studiously edited by the staff of the Committee and have tended to become formalized in ways that shed relatively little light on underlying thought or on differences of opinion within the Committee.

At his request, Representative Patman was allowed access to the detailed minutes of the F.O.M.C., presumably with the understanding that their use would be carefully restricted. In accordance with the agreement, two well known academic economists were set to work analyzing the minutes and drawing appropriate conclusions and generalizations from them. In the course of time, references to the study began to appear in newspapers and news magazines. The findings themselves (as reported) were not particularly startling. But the allegedly devious means of effecting this degree of disclosure and the violation of good faith said to have been involved created some excitement, particularly in governmental circles, including the Federal Reserve. Not all of this agitation, it may be assumed, reached the public view.

III. *The Case for Nondisclosure*

The statement of official policy on nondisclosure described above was accompanied by a detailed listing of reasons for nondisclosure. Those that are of an administrative character apply to the collection of statistical information generally and are not at issue in the present discussion. It is an accepted rule, for example, that respondents are entitled to know that the information which they submit will be combined, in case of publication, in ways that will prevent identification of individuals. This rule obtains throughout the government. There may at times be a question of its overzealous application; and it is conceivable that the rule might be used as a pretext for not providing information which could safely be made available. But these are ques-

[14] *Ibid.*, p. 253.
[15] *Ibid.*, pp. 251-52.

tions as to the manner of execution of the rule and are not to be interpreted as calling into question the rule itself.

The list of official reasons against disclosure includes generalities so broad as to provide little basis for criticism; e.g., where disclosure would: [16]

> Interfere with the accomplishment of the objectives of the Committee's actions taken with a view to accommodating commerce and business and with regard to their bearing upon the general credit situation of the country;
>
> Interfere with the orderly execution of policies adopted by the Committee;
>
> Interfere with the orderly execution and accomplishment of the objectives of policies adopted by other Government agencies concerned with economic and fiscal matters.

While these alleged reasons are so indefinite as to afford little basis for dissent, they also provide no significant guidance to actual operations. They would seem to be no more than a justification for the authorities to disclose information or not, as they happen to see fit. And this, as was indicated earlier, is what the acknowledged policy has, in essence, tended to amount to.

The heart of the official case for nondisclosure turns on the disturbing effects which disclosure would allegedly have on security markets and the encouragement which it presumably would afford to speculation and the circulation of false and unsettling rumors. The pertinent sections of the statement are as follows: [17]

> Disclosure of unpublished information concerning policies with respect to future open market operations which are under consideration or have been adopted by the Committee, and of unpublished information which might aid in anticipating action by the Committee, would:
>
> Permit speculators and others to reap unfair profits or other unfair advantages by speculative trading in securities, foreign exchange, and otherwise;
>
> Result in unnecessary and unwarranted disturbances in the securities markets;
>
> Cause misinterpretations and misunderstandings, with possible resultant impairment of public confidence in the nation's financial structure;
>
> Make open market operations more costly to the Federal Reserve Banks.

IV. *The Case for Greater Disclosure*

The grounds for increased disclosure of information relating to policy decisions have nowhere been stated with the explicitness or fullness given to the arguments for concealment. Criticism of nondisclosure, as in the instances noted above,[18] has tended to be confined to particular situations and, as often as not, to involve a clash of personalities more than a confrontation of issues. The positions taken have not infrequently been expressed in general terms about as broad as that between good and evil. And they may bear little relation to actions taken before or after.

In general, it may be stated that the case for disclosure rests on two main contentions: first, that the disadvantages of disclosure have been exaggerated, and second, that the possible benefits of greater disclosure have been underestimated.

A. Critique of Alleged Disadvantages of Disclosures

It is contended that disclosure of information on open market operations and policies would interfere with access to confidential information from dealers and other market participants. This is information which the authorities must have

[16] *Federal Reserve Bulletin*, June 1962, p. 692.

[17] *Ibid.* The validity of these contentions is examined below.

[18] *Supra*, pp. 80-81.

in order to carry on their activities effectively.[19]

The issue here is a misleading one. In the first place, the Ad Hoc Committee explicitly stated that the F.O.M.C. "faces no problem of lack of access to market information available to dealers. The Committee has been too powerful a market factor for its requests for information to be easily challenged." [20] In the second place, preservation of the usual safeguards against disclosing information relating to the affairs of individual correspondents is not in question. These are observed as a matter of routine procedure by all data collecting agencies. Because the number of dealers is small, it is quite likely that concealment of significant information, at least from those intimately acquainted with the market, is more difficult than it is in most other situations. Greater precautions against the leakage of information have at times been requested. In particular, suggestions have been offered for preventing the identification of particular sources of information.[21] The legitimacy of nondisclosure in this sense may readily be conceded.

The real issue is quite different. It relates to the concealment of information as to actions currently taken by the authorities, together with the reasons on which the actions are based. The relevant question is whether disclosure of information of this sort would make dealers and others more reluctant to supply desired information to the authorities. Conceivably, it could have precisely the opposite effect. The reason for this conclusion is that reticence almost inevitably breeds reticence. To the extent that this is the case, fuller disclosure might be expected to facilitate rather than impede access to dealer information. Instead of being a disadvantage, therefore, this is a possible advantage of increased disclosure.

The principal charge against disclosure, as noted earlier, is that it would encourage misunderstandings, market disturbances, speculation, and the reaping of unfair profits by certain individuals.[22] This is the position officially taken by the F.O.M.C. While the specific reference in the official pronouncement is to policies relating to future actions, the context makes clear that it relates to any information bearing on official policies which remains unpublished after the action has been taken.[23]

As matters now stand, the only assured disclosure of open market policy is that which is provided by the publication of abbreviated (and relatively unenlightening) minutes of the meetings of the F.O.M.C., as part of the annual report of the Board of Governors, which appears during the first half of the following calendar year. Is it to be assumed that the immediate announcement of policy actions as they are taken, rather than from perhaps three to fifteen months later, would foster misunderstandings, rumor, and speculation? That is what the official Committee pronouncement suggests.

When put in this form, the answer supplied by the Committee seems far from convincing. Moreover, evidence provided by the Ad Hoc Committee indicates that the situation which exists under the present rule of nondisclosure is itself conducive to speculation and intrigue:

> Dealers will continue to cultivate contacts with the Committee since no single quality is more important to their ability to survive than their ability to forecast correctly (1)

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[19] Cr., for example, Robert V. Roosa, *Federal Reserve Operations in the Money and Government Securities Markets*, Federal Reserve Bank of New York, 1956.

[20] *United States Monetary Policy, op. cit.*, p. 279.

[21] *Ibid.*, p. 280.

[22] *Supra*, p. 82.

[23] The present discussion is not concerned, of course, with the prohibition of disclosure through unauthorized as contrasted with official channels.

the probabilities of intervention in the market by the Federal Open Market Committee, (2) the direction of that intervention, either on the bid or the offered side, if it occurs, and (3) the sectors in the market to which it may be directed.

Under these circumstances, also, dealers tend to seek orders from the Committee, not because of the profit potentialities of business involved but because they may indicate the direction of the Federal Open Market Committee's thinking. Receipt of an order from the trading desk, in fact, acquires a significance out of all proportion to the actual commission involved. In addition, the dealer endeavors to cultivate access to the Committee and to its staff representatives. He readily accepts the obligation to give information on his activities and to make reports. He welcomes hour-to-hour contact with the trading desk, both to submit quotations and to render market reports. The responses, however guarded, may provide clues to the state of the market.[24]

This, we are told, is the situation that exists under a policy of concealment. It constitutes disclosure—limited, no doubt, and undependable, but nevertheless disclosure of sorts—by indirection, intrigue, and subterfuge.[25] It is hard to believe that conditions would be worse under a policy of disclosure.

The disturbing effects of allowing, however inadvertently, scraps of information to escape when the official policy is one of nondisclosure must be differentiated from the probable effects of opening information freely to all under a policy of disclosure. Once a policy of nondisclosure is embarked upon, information, whether true or false, assumes importance just because of the fact that nondisclosure is the policy. With ready access to dependable information, the random fact would cease to be a matter of much moment, and an unfounded rumor would presumably have a life no longer than the time required to make the enquiries necessary to disprove it.

In a setting of secrecy, the freedom of officials is greatly circumscribed. As long as a policy of concealment is in effect, every effort must be made to maintain it as tight as possible. Officials are imprisoned by their own policy. With the opposite policy, officials would be free, not so much because the rules were no longer binding as because what they knew or were thought to know would cease to possess unique value in the market place.

The substance of these observations is that the dangers of the type of disclosure described above appear to be greatly exaggerated. For the most part, they relate to leakage of information in a situation where a policy of nondisclosure is officially in force. They are more accurately to be regarded as difficulties and disadvantages stemming from a policy of nondisclosure. They would tend to be relieved rather than aggravated by adoption of a policy of free disclosure.

B. Advantages of Disclosure

The criticisms just presented of the alleged disadvantages of disclosure imply, in reverse, some of the positive benefits to be anticipated from a policy of disclosure. For one thing, administration would presumably be substantially simpler. And it was suggested that there might be less—not more—reason to fear disturbances arising out of rumor and speculation.

The basic argument for disclosure of information relating to central bank policy, however, is that which applies to free markets anywhere. It rests on the presumption that individual choice, competition, and the classic virtues of a system of private enterprise flourish best in an environment where participants in the market have equal access to all relevant information relating to that market.

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[24] *United States Monetary Policy, op. cit.*, p. 279.

[25] This is in no way intended to imply connivance on the part of Federal Reserve officials or staff.

Equality is not enough: equality of suppression could exist in a completely controlled market. Ideally, a free market signifies freedom to know, no less than freedom to act. And it seems self-evident that freedom to act intelligently is impaired to the degree that freedom to know is impaired.

These are the simple homilies of a free enterprise economy. What is remarkable is the casual way in which they are disregarded when it comes to the most essential activities of the central bank. It is a representative anomaly that officials of the Federal Reserve—in the years when, in the name of promoting free markets, they were so concerned to maintain the highly controversial bills-only policy—apparently saw no conflict between a policy of nondisclosure and the principles of a free market.

Support for a policy of disclosure, essentially along the lines just indicated, is by no means lacking in official pronouncements emanating from the Federal Reserve. The Annual Report of the Board for 1923, which has so often been quoted in connection with other aspects of Federal Reserve policy, contains the following statement:

> The more fully the public understands what the function of the Federal Reserve System is and on what indications its policies and actions are based, the simpler and easier will be the problems of credit administration in the United States. For this reason it has been the policy of the Board to inform the public, either through its official monthly publication or by statements to the press, on matters in which the public has an interest and to which its attention should be drawn. By this means the Board presents to the public a statement of the problems confronting the system and of the attitude of the Board toward current banking and credit developments. The public is a partner in the Federal Reserve System. The cooperation of the public based upon an understanding of the broad outlines of Federal Reserve credit policy is of the greatest advantage to a good functioning of the System.[26]

Nearly thirty years later the Board of Governors reaffirmed a policy of providing public information. But this time the statement is found, on close examination, to contain a number of qualifying words and is capable of being interpreted as no more than a promise to provide the public with as much information as officials of the System think good for them. The aims of the informational activities of the System were said to be:

> To explain to the banking and financial community as well as to the public generally the System's statutory purposes, responsibilities, and operations, and their relation to the functioning of the economy.
> To provide for mutual interchange of ideas that will keep bankers, businessmen, and the public generally informed of developments, regulations, policies, and operations of the System, and that will keep the System informed of economic and financial developments and of public attitudes toward System regulations, policies and objectives.
> To make available to the interested public factual and analytical materials developed within the System that will contribute to better understanding of economic and financial trends underlying and affecting banking activities and credit and monetary policies.[27]

The case for disclosure receives support, then, from standard concepts of economic policy. The concepts have been reaffirmed repeatedly by central bank authorities themselves, even at times when official deeds were at considerable variance with official words. The case must rest, however, not on doctrinaire considerations but on a realistic appraisal of how a policy of disclosure could be expected to work out in day-to-day operations. It will therefore be argued that

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[26] *Annual Report of the Federal Reserve Board, 1923*, p. 38.

[27] *Joint Committee on the Economic Report, Monetary Policy and the Management of Public Debt*, U. S. Printing Office, 1952, p. 322.

disclosure of relevant information on central bank decisions and actions should promote the attainment of policy objectives.

In the official pronouncement quoted earlier, disclosure was opposed on the ground that it "might aid in anticipating action by the [Federal Open Market] Committee." [28] The implications of this assumption are worth pursuing a step further. Let us suppose that the disclosure led traders to expect that sales would be made in the open market in sufficient volume to raise the level of rates (reduce availability of credit to the desired amount). Would they not then tend, themselves, to sell, or at least to hold off from the purchase of, securities in the open market? Would not this response reduce to that extent the necessity of actual intervention by the Federal Reserve while facilitating the end sought by the Committee?

It is entirely possible that some dealers would profit more than others from information of this sort. The same would be true of alert response to action taken by other departments of the government; e.g., tax reduction, authorization of fare increases, or a decision of the Supreme Court. It would be true of the response of traders to any influence, whether public or private, which operates in the market. There is surely nothing objectionable in that fact, so long as the information is equally available to all. The greater rewards that go to the enterpriser who makes the most skillful use of freely and equally available information are obviously an essential ingredient of our incentive system.

The widespread opposition to a policy of disclosure may well arise out of confusion as to the nature of the information which is to be disclosed. Even if it were conceded that disclosure of decisions as to *ends* would tend, as argued above, to be self-enforcing, it could still be maintained that disclosure as to precise *means* would be self-defeating. Knowledge that the Open Market Committee, for example, was about to sell $500 million of certificates could be thoroughly disrupting. The effect would be, as before, to induce responses in the private sector which would quickly bring about a tightening of credit conditions. But knowledge that there was a commitment to sell the full $500 million would place the Committee in a badly exposed position. Market responses would tend to be induced which could force rates to excessive heights.

The root of the difficulty in this hypothetical situation, however, is not the disclosure but the rigidity of the policy which places the F.O.M.C. in a straitjacket. Thus it was not disclosure of the bills-only policy that facilitated wide swings in the government securities market, but the policy itself. The authorities were thereby deprived of the power to exercise a stabilizing influence, and market responses were induced which, as in the illustration above, were frequently disruptive.

It is apparently disturbances such as these which critics of disclosure more or less have in mind. The solution, however, is not to be found in nondisclosure, but in refusal to accept rigid commitments as to means. Such commitments violate what many students regard as the first requirement of effective central bank policy, namely, freedom to exercise discretion.[29] But if such commitments are actually in force, however inadvisedly, disclosure may still be the best policy. Being in the open they are there for all to see—to exploit or to criticize as the case may be—with the result that they are likely to be corrected that much sooner.

[28] *Supra*, p. 82.

[29] Cf., for example, R. S. Sayers, *Central Banking After Bagehot* (Oxford: Clarendon Press, 1957), pp. 1-7; and C. R. Whittlesey, *Lectures on Monetary Management, op. cit.*, pp. 51-69.

It may be that one of the reasons for concealing decisions as to monetary policy, and more particularly the reasons upon which they are based, is to avoid embarrassment later on in case it appears that a different course would have been wiser. This is a reason which is certainly not acknowledged and perhaps not even consciously recognized, but one does not have to be a very deep student of human nature to feel sure that it exists. One suspects, indeed, that this is the primary reason why the policy of nondisclosure became established in the first place and continues to survive.

Nondisclosure may perhaps be defended on the ground that central bankers require this sort of protection. They are indeed subject to public criticism and to interference from politicians and others. If what they decided and the reasons for the decisions were a matter of immediate record, would they not be the object of even more criticism and interference? Would they become so exposed that competent persons either would refuse to accept appointment or once appointed would take refuge in inaction?

One hesitates to accept the conclusion that democratic processes are as stultifying as this implies. There are, moreover, other and more practical grounds for rejecting this line of reasoning. The wisdom that goes with hindsight is likely to be greater the longer the period of time that has elapsed between the event and the point from which it is viewed. Immediate disclosure of decision and reasons would reduce to a minimum the time period from which both were subject to public evaluation. Even though later events raised doubts as to the wisdom of the actions taken, the critics would then be in a weak position unless, as would seldom be the case, they had presented their criticism at the time rather than later on when conditions had changed.

So much for the negative side of the argument. There is much to be said for the positive advantages, from an operational standpoint, of immediate disclosure. In the first place, by subjecting policy decisions to early evaluation, the possibility would be maximized of improvements being effected in time for them to be of practical benefit. Secondly, experts outside the system would be challenged to make what contribution they could, in situations of current rather than merely historical importance. Thirdly, a responsibility would be placed upon central bankers to state their positions and give a reasoned justification for them. It is to be hoped that, as a consequence, central bankers of ability would rise in stature and influence—as Supreme Court justices do—on the basis of their written opinions. And it is likewise to be hoped that, as a further consequence, central bankers of lesser accomplishment would the more quickly cease to be central bankers.

*Comments on the Philadelphia-Girard Decision**

The landmark decision of the Supreme Court in the Philadelphia-Girard case, handed down on June 17, 1963, raises vital issues for the future of public regulation of banking. Since the economic reasoning of the Court appears to have played a significant role in its decision, an appraisal of this aspect of the case was undertaken in the Office of the Comptroller of the Currency. In the interest of stimulating further study and discussion of these issues, the papers prepared in the Department of Banking and Economic Research are reproduced below. Comments and rejoinders are invited.

* 374 U.S. 321 (1963)

Bank Mergers and Public Policy

►DAVID C. MOTTER

On June 17, 1963, the Supreme Court enjoined the proposed merger of The Philadelphia National Bank (PNB) and Girard Trust Corn Exchange Bank (Girard), the second and third largest commercial banks in Philadelphia, ruling that the merger would be in violation of Section 7 of the Clayton Act. The Philadelphia case raises a number of issues which are discussed in this paper under the following headings: (1) legal implications; (2) comparison of the criteria of Section 7 of the Clayton Act and those of the Bank Merger Act; (3) application of the competitive criterion; (4) application of the other Bank Merger Act criteria; and (5) policy issues.

I. *Legal Implications*

The prime legal issue of the Philadelphia case[1] was whether Section 7 of the Clayton Act, as amended in 1950 by the Celler-Kefauver Act,[2] applied to bank fusions of the form typical in the banking industry.[3] A majority of the Supreme

[1] U.S. v. The Philadelphia National Bank et al., 374 U.S. 321 (1963). References to the majority opinion are cited hereinafter as *Decision*. References to Justice Harlan's dissenting opinion are cited as *Dissent*.

[2] Act of December 29, 1950, Public Law 899, Sec. 7, 38 Stat. 731, as amended; 15 U.S.C. 18.

[3] The Antitrust Division also alleged that the proposed merger would violate the Sherman Act. The Court did not rule on this allegation, due to its finding of a violation of the Clayton Act. The Clayton Act applies a much stricter test to mergers than does the Sherman Act. The Senate report on the Celler-Kefauver Act held that the Congress' objective therein was to "fram(e) a bill" which "reaches far beyond the Sherman

Court has held that it does. The task of examining the legal basis of the decision is best left to lawyers. It will suffice here to note that both the wording and the legislative histories of the Celler-Kefauver Act (1950) and the Bank Merger Act[4] (1960) raise a reasonable doubt that Congress intended, in 1950, or believed, in 1960, that the amended Section 7 applied to bank fusions of the form typical in that industry.[5]

The importance of the decision stems from the fact that the narrow competitive criterion contained in Section 7, Clayton, will be controlling for bank mergers rather than the broader criteria of the Bank Merger Act.[6] The crucial public policy question concerns which act is likely to yield results most consistent with the public interest. This question is examined in Part V.

II. *Comparison of the Criteria of Section 7 of the Clayton Act and those of the Bank Merger Act*

The relevant portion of Section 7 reads:

No corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital . . . of another corporation engaged also in commerce, where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to

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Act." Senate Report 1775, 81st Cong., 2d Sess. (1950), p. 5. The Attorney General's National Committee to Study the Antitrust Laws held that ". . . Section 7, unlike the Sherman Act, requires findings and conclusions, not of *actual* anticompetitive effects, but merely of a *reasonable probability* of a substantial lessening of competition or tendency toward monopoly." *Report*, March 31, 1955, p. 118.

This paper is concerned with public policy toward banking *mergers* only, and does not address itself to the broader question of the applicability of the Sherman Act to banking.

[4] Act of May 13, 1960, Public Law 86-463, 74 Stat. 129, 12 U.S.C. 1828(c).

[5] The Celler-Kefauver Act closed the "asset acquisition" loophole of Section 7 for corporations "subject to the jurisdiction of the Federal Trade Commission." Banks, of course, are excluded from FTC jurisdiction. Thus, even the Court majority in the Philadelphia case admitted that "if the proposed merger be deemed an assets acquisition, it is not within Section 7." *Decision*, p. 336. In light of this admission it is useful to quote from the Senate and House reports in 1960 on the Bank Merger Act: "Since bank mergers are customarily, if not invariably, carried out by asset acquisitions, they are exempt from Section 7 of the Clayton Act." Sen. Report No. 196, 86th Cong., 1st Sess., pp. 1-2. "Because Section 7 is limited, insofar as banks are concerned, to cases where a merger is accomplished through acquisition of stock, and because bank mergers are accomplished by asset acquisitions rather than stock acquisitions, the act offers 'little help,' in the words of Hon. Robert A. Bicks, acting head of the Antitrust Division, in controlling bank mergers." H.R. Report No. 1416, 86th Cong., 2d Sess., p. 5. (Both quoted in Justice Harlan's *Dissent*, p. 378 and n. 15. p. 379.)

The Court majority construed bank "asset acquisitions" in a very narrow fashion. "A cash purchase of another bank's assets would not seem to be a fully effective method of corporate acquisition. . . . A cash purchase, in effect, only substitutes cash for cash, since bank assets consist principally of cash and very liquid securities and loan receivables, and adds nothing to the acquiring bank's capital and surplus or to its working capital. True, an exchange of its stock for assets would achieve the acquiring bank's objectives. We are clear, however, that . . . if such an exchange (or other clearly evasive transaction) were tantamount in its effects to a merger, the exchange would not be an 'assets' acquisition within the meaning of Section 7 but would be treated as a transaction subject to that section." *Decision*, n. 22, p. 344.

The Federal Reserve Board received jurisdiction under the original Clayton Act over bank stock acquisitions, and has retained that jurisdiction to the present, according to the Court. *Decision*, n. 22, p. 345. The Board was successful in its sole Section 7 action. See Edward S. Herman, "Board of Governors v. Transamerica: Victory Out of Defeat," *Antitrust Bulletin*, Vol. 4, 1959, pp. 521-539.

[6] This could be the case whenever the Antitrust Division disagrees with a merger approval by the relevant banking authority.

lessen competition, or to tend to create a monopoly.[7]

The Bank Merger Act applies the following tests:

> In granting or withholding consent . . . , the Comptroller, the Board, or the Corporation, as the case may be, shall consider the financial history and condition of each of the banks involved, the adequacy of its capital structure, its future earnings prospects, the general character of its management, the convenience and needs of the community to be served, and whether or not its corporate powers are consistent with the purposes of this Act . . . . (T)he appropriate agency shall also take into consideration the effect of the transaction on competition (including any tendency toward monopoly), and shall not approve the transaction unless, after considering all such factors, it finds the transaction to be in the public interest.[8]

Three major differences exist between the merger criteria of the two acts: (1) the competitive criterion of the Bank Merger Act is significantly broader than that of Section 7, Clayton; (2) the Bank Merger Act contains a number of factors which must be considered along with the competitive criterion by the bank supervisory agencies in evaluating a merger, while the narrow competitive criterion of Section 7 is its sole standard; (3) the Bank Merger Act calls upon the bank supervisory agency to weigh all the relevant factors noted in light of the "public interest" while there is no explicit "public interest" standard in Section 7.

Under Section 7, a merger is disallowed whenever the courts find a reasonable probability that competition will be substantially lessened in one relevant market. Under the Bank Merger Act, because of the greater scope of the competitive criterion (See Part III) and the inclusion of certain standards not directly related to the degree of competition (See Part IV), it is possible for a merger to be found to be in the public interest even though it will have the probable effect of a reduction in competition in one market.

This distinction between the two acts would hold under the usual economic and legal definitions of competition. Only if one defined "competition" in such a way that any development which improved market performance was equated with "increased competition" and any worsening of market performance was tautologically associated with "decreased competition" would the distinction disappear.

Two quotations may suffice to illustrate that the courts under Section 7 have refused to accept any purportedly "favorable" effect as a possible offset to a diminution of competition in one relevant market. District Court Judge Weinfeld, in the Bethlehem-Youngstown case, held as follows:

> If the merger offends the statute in any relevant market then good motives and even demonstrable benefits are irrelevant and afford no defense. . . . The significance and objectives of the Clayton Act and the 1950 amendment are well documented. In approving the policy embodied in these acts, Congress rejected the alleged advantages of size in favor of the preservation of a competitive system. The consideration to be accorded to benefits of one kind or another in one section or another of the country which may flow from a merger involving a substantial lessening of competition is a matter properly to be urged upon Congress. It is outside the province of the Court. The simple test under Section 7 is whether or not the merger may substantially lessen competition "in any line of commerce in any section of the country.[9]

In the Philadelphia case under discus-

[7] See *supra*, note 2.

[8] See *supra*, note 4.

[9] U.S. v. Bethlehem Steel Corporation et al., 168 F. Supp. 576 (1958), pp. 617-618.

sion, the Supreme Court made the point this way:

> We are clear . . . that a merger the effect of which "may be substantially to lessen competition" is not saved because, on some ultimate reckoning of social or economic debits and credits, it may be deemed beneficial. A value choice of such magnitude is beyond the ordinary limits of judicial competence, and in any event has been made for us already, by Congress when it enacted the amended Section 7. Congress determined to preserve our traditionally competitive economy. It therefore proscribed anticompetitive mergers, the benign and the malignant alike, fully aware, we must assume, that some price might have to be paid.[10]

However, a test based on "some ultimate reckoning of social or economic debits and credits," explicitly rejected by the Court for Section 7 cases, may come close to describing the "public interest" test devised by Congress in the Bank Merger Act.

III. *Application of the Competitive Criterion*

A determination of the competitive effect of a merger must be made under either Section 7, Clayton, or the Bank Merger Act. To make this determination, it is necessary first to decide what market or markets are affected by the merger.

A. The Revelant Market

Section 7 calls for a testing of the competitive impact of a merger "in any line of commerce in any section of the country" which may be affected. The "line of commerce" and the "section of the country," taken together, yield the relevant market for purposes of economic analysis.

The Antitrust Division (AD) urged the use of the "line of commerce" test applied by the Supreme Court in the duPont-General Motors case; i.e., whether the products (or services) concerned "have sufficient peculiar characteristics and uses to constitute them products sufficiently distinct from all others. . . ."[11] The AD contended that under this test "commercial banking" would constitute the major "line of commerce," since the general services offered by commercial banks, and some of the specialized services, were either not available from nonbank sources or were available only marginally.[12]

PNB and Girard urged the use of the "line of commerce" test applied in the duPont Cellophane case; i.e., a determination as to whether the products (or services) are "reasonably interchangeable for the purpose for which (they) are produced—price, use and qualities considered."[13] The banks maintained before the District Court that under this rule "commercial banking" in total cannot be

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[10] *Decision*, p. 371.

[11] United States v. E. I. duPont de Nemours, 353 U.S. 586, pp. 593-4. Quoted in decision of District Court Judge Clary, U.S. v. The Philadelphia National Bank et al., 201 F. Supp. 348, E. D. Pa. (1962), p. 361. Clary's decision is cited hereinafter as *District Decision*.

[12] The AD, in its brief filed with the Supreme Court, maintained that "in this case commercial banking, as such, is not only a relevant product market but it is the most relevant market for appraising the validity of the merger." *Brief for the United States*, U.S. v. The Philadelphia National Bank et al., Sup. Ct., October term, 1962, No. 83, p. 31. In its argument before the District Court, the AD advanced the following "lines of commerce," in addition to "commercial banking": commercial and industrial loans, installment lending to individuals, single payment loans to individuals, real estate loans, personal trusts, time deposits of partnerships and corporations, time and savings deposits, demand deposits, and IPC (Individual, Partnership and Corporation) demand deposits. *District Decision*, p. 361.

[13] United States v. E. I. duPont de Nemours, 351 U.S. 377, p. 404. Quoted in *District Decision*, p. 361.

treated as a relevant line of commerce.[14] It was the banks' position that commercial banking has two main subdivisions, the securing of deposits and the granting of loans, and that each of these subdivisions can be further divided into the various types of deposits and loans. According to the banks, for each such distinct type of loan or deposit, there are different customers, different types of competitors, different geographic areas concerned, and different degrees of competition.[15] The banks' position would yield three conclusions: (1) commercial banking includes a number of distinct "lines of commerce" in the meaning of Section 7 but is not itself such a line of commerce; (2) in each such line of commerce the non-bank competitors of commercial banks must be considered; (3) each line of commerce should be associated with a "section of the country" peculiarly relevant to it.

Both District Court Judge Clary and the Supreme Court decided to treat "commercial banking" as *the* relevant line of commerce. In the words of the majority opinion:

> We agree with the District Court that the cluster of products (various kinds of credit) and services (such as checking accounts and trust administration) denoted by the term "commercial banking" composes a distinct line of commerce. Some commercial banking products or services are so distinctive that they are entirely free of effective competition from products or services of other financial institutions; the checking account is in this category. Others enjoy such cost advantages as to be insulated within a broad range from substitutes furnished by other institutions. For example, commercial banks compete with small-loan companies in the personal-loan market; but the small-loan companies' rates are invariably much higher than the banks', in part, it seems, because the companies' working capital consists in substantial part of bank loans. Finally, there are banking facilities which, although in terms of cost and price they are freely competitive with the facilities provided by other financial institutions, nevertheless enjoy a settled consumer preference, insulating them, to a marked degree, from competition; this seems to be the case with savings deposits.[16]

The economic truth may lie somewhere between the contentions of the banks and the AD. To the extent that consumers of banking services think of commercial banks as "department stores of finance," and act according, there is support for the view that commercial banking should be considered as a relevant line of commerce. Bank customers, both corporate and individual, do respond *within limits* to the convenience of carrying out all their financial transactions under one roof. But the crucial question remains: to what extent does the convenience factor actually "insulate" commercial banks from the competition of non-bank financial institutions? It is probable, for example, that most commercial bank officials would be surprised to learn that their banks are "insulat(ed) . . . to a marked degree from competition" by other financial institutions for savings deposits, as the Court maintained.[17]

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[14] The banks' position outlined here is that presented by them to the District Court. The District Court ruled against this position, holding that "commercial banking" was the relevant "line of commerce." However, the same court ruled in favor of the merger. Perhaps in consequence, the banks did not urge their "line of commerce" views before the Supreme Court, but concentrated on the relevant "section of the country," a subject on which the District Court had largely agreed with the banks' position. See *Brief for Appellees*, U.S. v. The Philadelphia National Bank et al., Sup. Ct., October term, 1962, No. 83, pp. 44-55.

[15] *District Decision*, p. 361.

[16] *Decision*, pp. 356-357. The Court's treatment of the small-loan companies seems to imply that some firms can charge higher prices than their competitors *because* their costs are higher.

[17] *Decision*, p. 357. The testimony by one defense witness, offered by the Court in support of its position, is interesting but hardly conclusive.

The checking account service (holding of demand deposits) may be the only major service offered uniquely by commercial banks. In offering each of the other major banking services, commercial banks face competition in varying degree from non-bank financial institutions. This competition cannot be ignored in the evaluation of the state of competition in a particular market. Since different non-bank competitors are involved in connection with each of the major products and services, the ideal treatment would call for a separate analysis of each major banking service or product. In the competition for savings deposits, savings and loan associations and mutual savings banks would be considered along with commercial banks. The role of insurance companies in the market for commercial and industrial loans would be recognized. Similar treatment of each major banking service or product would yield a more nearly accurate picture of the alternative sources of supply actually available to customers.

Analysis of the sort described above would, of course, be more difficult than would the over-simplified treatment adopted by the Court. However, the quality of the input, in terms of economic meaningfulness, is likely to determine the quality of the output.

In the actual analysis of market data, the ideal treatment is not always possible or feasible. In the instant case, there may be some usefulness in developing statistics for commercial banking as a whole. However, when this is done, the results must be heavily qualified in light of the considerations discussed above. For example, statistics of concentration based on commercial bank deposits, loans or assets will tend to overstate the economically relevant degree of concentration since the role of non-bank financial institutions is neglected.

The problems involved in the determination of the proper "section of the country" are in part related to those involved in establishing the "line of commerce." Again, ideally, the relevant section of the country would differ for each major banking service or product. For example, an individual who wishes to set up a small checking account is quite likely to choose the bank with an office closest to his residence or place of work, and is quite unlikely to choose one which necessitates inconvenient trips of five miles or even one mile. At the other extreme, a corporation wishing to secure a loan of millions of dollars will not hesitate to "shop" for this credit throughout the major financial centers of the whole country. In the Philadelphia case, choice of *any one* section of the country, to the exclusion of others, can hardly lead to a realistic picture.

Under Pennsylvania law, banks may establish branches only in counties contiguous to the county in which the bank's home office is located. PNB and Girard, each with home offices in Philadelphia County, may establish branches only in the adjacent counties of Bucks, Montgomery and Delaware. The AD contended that this four-county area was the relevant section of the country under Section 7. District Court Judge Clary rejected this contention while the Supreme Court accepted it.

The state branching restrictions were apparently a factor in the Court's finding. The Court held:

> We think that the four-county Philadelphia metropolitan area, *which state law apparently recognizes as a meaningful banking community in allowing Philadelphia banks to branch within it,* and which would seem roughly to delineate the area in which bank customers that are neither very large nor very small find it practical to do their banking business, is a more appropriate "section of the country" in which to appraise the instant merger than any larger or smaller or different area.[18]

[18] *Decision,* p. 361. Italics added.

The fact that state branching restrictions prevent Philadelphia County banks from operating outside the four-county area is, in itself, irrelevant to the determination of the competitively meaningful "section of the country." This may become more obvious when one contrasts the situation in states which allow statewide branching with that in states which allow only unit banking. The combination of factors which were important in shaping the branching restrictions of the various states could only coincidentally yield a branching area similar to an economically relevant market area. It is anomalous that a court so concerned with competition in banking should rely upon branching restrictions, which often act to stultify competition, as a factor in determining the proper "section of the country."

There is merit in Judge Clary's finding that the eight-county metropolitan area, including three New Jersey counties, should be treated as *one* of the relevant "sections of the country."[19] Large numbers of people commute across the Delaware River from Camden to Philadelphia and vice versa; as a result, there is a significant degree of competition even for small deposits and loans between the Pennsylvania banks and nonbank financial institutions and their counterparts in New Jersey. Further, in the market involving medium and large commercial and industrial loans, there exists competition among banks and other sources of credit throughout the northeast region of the United States. Finally, for the largest loans, it is meaningful to consider the whole country as the relevant "section of the country."

B. The Measurement of Concentration

Any measure of market concentration relies on the initial definition of that market. Therefore any concentration measure can be only as meaningful as the market definition used. In the Philadelphia case the AD placed great weight on statistics of concentration of commercial banking in the four-county Philadelphia area. The effect of the AD's choice of both "line of commerce" and "section of the country" is to overstate significantly the economically meaningful degree of concentration. This overstatement is due primarily to two factors: (1) the exclusion, already noted, of non-bank financial institutions which compete with commercial banks; and (2) the choice of a rather narrow geographic area without consideration of broader ones. In any consideration of the AD concentration statistics, this overstatement should be kept in mind.

The AD claimed that "commercial banking" is already quite concentrated in the four-county area, that mergers have added to this concentration in recent years, and that the PNB-Girard merger would further increase concentration significantly. Given the AD's definition of the market, these statements are supported by the data. It should be noted, however, that "commercial banking" in Philadelphia is less concentrated than in a number of other financial centers. (See Part IV.)

C. Concentration and Competition

Building on its concentration data, the AD proceeded on the assumption that the higher the degree of concentration, the less vigorous the competition was likely to be. From this assumption it would follow that a merger which, as in the instant case, significantly increases concentration would lead to the likelihood of a substantial lessening of competition.

The Supreme Court accepted this reasoning. It held as follows:

> . . . we think that a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a sig-

[19] *District Decision*, p. 364.

nificant increase in the concentration of firms in that market, is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects.[20]

The Court then asserted that its "test is fully consonant with economic theory" since it is "common ground among most economists" that "(c)ompetition is likely to be greatest when there are many sellers, none of which has any significant market share."[21] This last statement is indeed common ground among economists, since it is essentially a statement of the major condition for "pure competition." However, the point at issue is not whether a purely competitive market is more "competitive" than an oligopolistic market; one can point to few instances of pure competition in the U. S. economy. The question rather is the much more complex one of the competitive impact of a change in concentration in a market already characterized by a substantial degree of concentration.

The nature of this question is such that no completely general resolution of it is possible. Some good preliminary empirical work has been done but much more remains to be done. Two tentative conclusions may be drawn from the studies made, one of which heavily qualifies the other: (1) there is some *tendency, other things being equal,* for competition to be more vigorous in markets of moderate concentration than in markets with very high concentration;[22] (2) the "other things being equal" phrase cloaks so many possible differences in market situations that the generalization in (1) is of little value unless tested by a painstaking case-by-case approach. The qualification in (2) is of crucial importance in any application to banking, since the latter differs in so many respects from industrial and commercial endeavors.[23] (See Part V.)

D. Competitive Impact of the PNB-Girard Merger Under Section 7, Clayton

Despite all the qualifications and criticisms of the AD case made above, it does not necessarily follow that the proposed merger fails to violate the competitive criterion embodied in Section 7. The author believes, and will develop the position in Part V, that the public interest would be better served by the application of the Bank Merger Act procedures and criteria than by the application of Section 7 to bank mergers. However, in the Philadelphia case, the Court saw fit to hold that the Clayton Act was applicable.

It has already been noted that several "relevant markets" are involved in the case. It is likely that the effect of the merger would have been to increase competition in the regional and national markets for large loans and deposits.

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[20] *Decision*, p. 363.

[21] *Idem*. The last quotation above is taken by the Court from Comment, "Substantially to Lessen Competition . . .": Current Problems of Horizontal Mergers, 68 *Yale Law Journal*, pp. 1638-1639.

[22] See Joe S. Bain, *Industrial Organization*, 1959, for a careful analysis of data for twenty *manufacturing* industries.

[23] One example may be noted in passing. Collusion is always a possibility in oligopolistic markets. Such collusion may be overt, as in the electrical equipment case. More often it takes the form of "tacit" collusion such as may be involved in effective price leadership. *Tacit* collusion presents an extremely important and difficult public policy problem which has not been effectively resolved for *any type* of industry in which competition has some role to play. However, in the case of banking, it is probable that the rigorous bank examination procedures as now administered by the bank supervisory agencies may nearly eliminate the possibility of *overt* collusion. See letter from the Comptroller of the Currency to the presidents of all national banks, dated February 28, 1962, quoted in House Committee on Banking and Currency, *Hearings*, 88th Cong., 1st Sess., February 18, 1963, p. 127.

However, in the prevailing court interpretation of Section 7, such a probable increase in competition in one or more markets cannot be weighed against the probable lessening of competition in another market.[24] Whether this is a weakness in Section 7 is open to debate. It is clear that under the Bank Merger Act the differential impact on competition in a number of markets can be weighed and evaluated in light of the public interest.

Further, the emphasis on the *preventive* aspects of Section 7 in the legislative history and in judicial interpretations makes it plain that a proposed merger may violate the act even though vigorous competition may still be likely following the merger. This possibility would depend upon the pre-merger level of competition. The Supreme Court in the Brown Shoe case [25] disallowed a merger in an industry that is much less concentrated than many other manufacturing industries, giving great weight to the *trend* toward increasing concentration in the last decade. There is some merit in according importance to the trend of concentration in merger cases; while it may be very difficult to *demonstrate* the likely immediate impact on competition of any *one* merger, a series of such mergers would undoubtedly have an effect.

In the Philadelphia case, 41 commercial banks (including a number with significant market shares) and a large number of non-bank financial institutions would have remained following the merger. It seems probable that competition would have remained strong, whether the four-county or eight-county area were considered.[26] However, under Section 7 the post-merger *level* of competition is not as important as the anticipated effect on the pre-merger level.[27] Again, under the Bank Merger Act, suitable weight could be given to both factors.

IV. *Application of the other Bank Merger Act Criteria*

As noted above, even under the *competitive* criterion, the broader wording of the Bank Merger Act would allow some factors, such as differential impact on competition in several markets and post-merger level of competition, to be given different weights than has been done in Section 7 cases. The additional criteria included in the Bank Merger Act allow still other factors to be taken into consideration in arriving at a decision consistent with the public interest.

A. Banking Factors: "The Convenience and Needs of the Community to Be Served"

PNB and Girard maintained that the economy of the Philadelphia area was handicapped by the comparatively small size of its largest banks, relative to the size of banks in other leading cities. This contention rested primarily on the existence of legal "lending limits," based on capital and surplus of the banks. According to the argument, Philadelphia banks, including the current leader, First Pennsylvania, are unable to meet the credit needs of some of the larger corporations in the Philadelphia area due to these lending limits. The merger would have led to a bank with a lending limit of

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[24] *Decision*, p. 370.

[25] Brown Shoe Co. v. United States, 370 U.S. 294.

[26] Judge Clary noted that, considering commercial banks only and their legal "lending limits," the following number of alternative sources for loans would have been available to borrowers after the merger: 39 for loans up to $25,000; 18 for loans up to $250,000; 7 for loans up to $1,000,000; and 1, as a result of the merger, for a loan up to $15,000,000. *District Decision*, p. 368.

[27] In the Brown Shoe case, the Supreme Court held that "remaining vigor (of competition) cannot immunize a merger if the trend in that industry is toward oligopoly." 370 U.S. 294, p. 333.

$15,000,000, about 50 percent larger than the current lending limit of First Pennsylvania.

The degree of bank concentration is significantly less in the Philadelphia metropolitan area than in many other metropolitan areas in the United States. As of 1960, when the boards of directors of PNB and Girard approved the merger, the largest Philadelphia bank, First Pennsylvania, accounted for 26.1 percent of all commercial bank deposits held by banks in the Philadelphia metropolitan area. This figure placed the Philadelphia area 54th among the 65 standard metropolitan areas, ranked by percentage of commercial bank deposits held by the largest bank. In a similar ranking by percentage of deposits held by the three largest banks, the Philadelphia area placed 48th, with 63.7 percent.[28]

The picture in connection with absolute size of Philadelphia's banks is similar. Twenty commercial banks in the U. S. have lending limits greater than that of any Philadelphia bank, and nine of these twenty are located in cities smaller than Philadelphia.[29]

The Supreme Court explicitly ruled the argument concerning Philadelphia development irrelevant under Section 7.[30] The argument can be considered on its merits under the Bank Merger Act.

B. Other Banking Factors

The Bank Merger Act also allows consideration of "the financial history and condition of each of the banks involved, the adequacy of its capital structure, its future earnings prospects, (and) the general character of its management . . . ." None of these factors were crucial to a decision in the PNB-Girard case, but in numerous other merger cases ruled on by the bank supervisory authorities they have been of great importance. In the interest of sound policy these factors should be properly considered. The Bank Merger Act calls explicitly for such consideration; the Clayton Act does not.[31]

C. Economies of Large Scale

Companies seeking to be allowed to merge have on occasion advanced the view that the larger scale of operations of the merged concern would allow lower unit costs of product or service, which lower costs would in turn be passed on to consumers in the form of lower prices. The courts have explicitly rejected this argument as irrelevant for Section 7 cases. The Supreme Court held in the Brown Shoe decision that if a choice had to be made between decentralization and efficiency, the will of Congress as expressed in Section 7 would call for the choice of

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[28] These rankings were developed from a table presented in Federal Deposit Insurance Corporation, *Annual Report, 1960,* pp. 102-103. The data are as of June 15, 1960. The figures for deposit concentration incorporated in the District and Supreme Courts' decisions are based on the four-county area, and thus are not directly comparable with the above. The bank resulting from a PNB-Girard merger would have held approximately 36 percent of the total commercial bank deposits of the four-county area (*District Decision,* p. 366), and thus a somewhat smaller percentage of all deposits of the metropolitan area. If a 36 percent figure were applied to the 1960 metropolitan area data, it would result in a ranking of 32nd among the 65 areas.

[29] *District Decision,* p. 366.

[30] *Decision,* pp. 370-371.

[31] It is true that the courts have recognized "failing company" and "small company" arguments under Section 7. In the Brown Shoe decision, the Supreme Court noted that "appellant has presented no mitigating factors, such as the business failure or the inadequate resources of one of the parties that may have prevented it from maintaining its competitive position, nor a demonstrated need for combination to enable small companies to enter into a more meaningful competition with those dominating the relevant markets." 370 U.S. 294, p. 346.

decentralization.[32] Judge Weinfeld, in his Bethlehem-Youngstown decision, held that Congress, in passing the Clayton Act and the Celler-Kefauver Act, had "rejected the alleged advantages of size in favor of the preservation of a competitive system."[33]

The "economies of scale" argument could be considered under the Bank Merger Act. Two principal problems would be encountered: (1) the necessity of estimating post-merger long-run costs; (2) the necessity of determining whether the competition-regulation mix present would force the passing along of benefits to consumers of banking services.

Lyle E. Gramley, in a study prepared for the Federal Reserve Bank of Kansas City, found "differences in efficiency" favorable to large banks over small banks, which he attributed to "the opportunities that are made possible by larger-scale operations to adopt modes of organization that make better use of labor resources."[34] If branching restrictions were somewhat relaxed, it is possible that banks could gain additional economies of scale, to the benefit of consumers of banking services, without increasing the degree of concentration in any one local market.

V. *Policy Issues*

The Philadelphia decision, in and of itself, does not resolve the broader question: what public policy toward bank mergers is most likely to achieve results consistent with the public interest? The clarification of the status of the Clayton Act as applied to banks simply makes plain what *existing* public policy *is*, not necessarily what it *should be*.

The basic issue is the following: what criteria should be applied to bank mergers in order to achieve results most consistent with the public interest? The Philadelphia decision applies the same test to bank mergers as is applied to industrial and commercial mergers. Thus the basic issue can be restated in this form: are the operations of the banking industry sufficiently differentiated, by their nature and by the degree of regulation imposed, from industrial and commercial activity as to require the application of different merger criteria?

One need not go beyond the Supreme Court's Philadelphia decision to find a recognition that "the governmental controls of American banking are manifold."[35] The Court noted the following aspects of bank regulation, among others:

> . . . the Federal Reserve System . . . regulates the supply of money and credit in the economy and thereby indirectly regulates the interest rates of bank loans. . . . Entry, branching, and acquisitions are covered by a network of state and federal statutes. . . . Banks are also subject to a number of specific provisions aimed at ensuring sound banking practices. For example, member banks of the Federal Reserve System may not pay interest on demand deposits, . . . may not invest in common stocks or hold for

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[32] The Court statement is as follows: ". . . we cannot fail to recognize Congress' desire to promote competition through the protection of viable, small, locally owned businesses. Congress appreciated that occasional higher costs and prices might result from the maintenance of fragmented industries and markets. It resolved these competing considerations in favor of decentralization. We must give effect to that decision." 370 U.S. 294, p. 344.

It should be noted that in the Brown Shoe decision, the Court did indicate that certain factors may be considered as possible offsets to a reduction of competition under Section 7. See *supra*, note 31, for one instance. Also the Court found that the Brown-Kinney merger would "foreclose competition . . . *without producing any countervailing competitive, economic, or social advantages.*" 370 U.S. 294, p. 334. Italics added.

[33] U.S. v. Bethlehem Steel Corporation, et al., 168 F. Supp. 576(1958), p. 617.

[34] *A Study of Scale Economies in Banking*, Federal Reserve Bank of Kansas City, 1962, p. 59.

[35] *Decision*, p. 327.

their own account investment securities of any one obligor in excess of 10% of the bank's unimpaired capital and surplus. . . . But perhaps the most effective weapon of federal regulation of banking is the broad visitatorial power of federal bank examiners. . . . (T)he agencies maintain virtually a day-to-day surveillance of the American banking system. . . . Federal supervision of banking has been called "(p)robably the outstanding example in the federal government of regulation of an entire industry through methods of supervision. . . ." [36]

Such a comprehensive system of supervision places banking between the unregulated and the fully regulated sectors of the economy. In the unregulated sector, where competition must act as the prime consumer safeguard, it is crucial that entry barriers be kept as low as possible and that competition be maintained even though this very competition will lead to the disappearance of some competitors. In the fully regulated sector, public authority imposes price-output decisions on the firms and thus acts as the consumer safeguard. In the banking industry, both regulation and competition have vital roles to play.

The maintenance of the solvency and liquidity of the banking system is a necessary condition for a healthy economy. Past experience illustrates that unrestricted entry into banking is incompatible with the achievement of banking solvency and liquidity. Thus banking authorities have been vested with complete power over entry. This necessary restriction on freedom of entry inevitably shapes the structure of banking and the form and degree of competition present. Similarly, bank mergers have a structural and competitive impact. A logical corollary of the entry control vested in banking authorities is control over mergers by the same authorities. Establishment of a set of criteria for bank mergers which takes full account of the sensitive role of the banking system in the economy, and application of these criteria by authorities fully aware of and informed about this role, would seem the policy most likely to lead to results consistent with the public interest.

The need for a solvent and liquid banking system does not imply that individual banks must be insulated from the vigorous competition of rivals, old or new. Within the regulatory framework—the complete public controls over banking structure (entry, branching, and merger) and the limited public controls over operations—it is necessary that competition among banks be maintained.

In the Bank Merger Act of 1960, the Congress recognized the proper roles of both regulation and competition in the banking industry. The bank supervisory agencies, with a wealth of banking expertise available, were called upon to consider both banking and competitive factors in weighing the impact of a proposed merger and to arrive at a decision consistent with the public interest, broadly interpreted. The major effect of the Philadelphia decision is to cast a pall over the Bank Merger Act and its basic philosophy.

[36] *Decision*, pp. 327-330. The quotation in the last three lines was taken by the Court from 1 Davis, *Administrative Law*, Section 4.04, p. 247.

Private Competition and Public Regulation

►VICTOR ABRAMSON

Because the Supreme Court decision in the Philadelphia-Girard case appears to rest so heavily upon the Court's interpretation of the economic purposes of the Bank Merger Act and the antitrust laws, it is important to examine the economic reasoning which lay behind its judgment. The observations in this paper are directed, not to the legal aspects of this decision, but to the issues of public policy to which it gives rise. These issues relate both to the applicability of antitrust concepts to the regulated industry of banking, and to the economic implications of the Court's interpretation of these concepts.

I. *Banking and the Antitrust Laws*

Underlying the Court's judgment that the antitrust laws are applicable to banking is the key statement of its interpretation of those laws at pages 371-372 of the majority opinion:

> . . . a merger the effect of which "may be substantially to lessen competition" is not saved because, on some ultimate reckoning of social or economic debits and credits, it may be deemed beneficial. A value choice of such magnitude is beyond the ordinary limits of judicial competence . . . Congress. . . . proscribed anticompetitive mergers, the benign and the malignant alike, fully aware we must assume, that some price might have to be paid.
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> Section 7 . . . does require, however, that the forces of competition be allowed to operate within the broad framework of governmental regulation of the industry. The fact that banking is a highly regulated industry critical to the Nation's welfare makes the play of competition not less important but more so. . . . unless competition is allowed to fulfill its role as an economic regulator in the banking industry, the result may well be even more governmental regulation.

The thought that a showing of economic benefit to society cannot justify a merger where there is a substantial lessening of competition reflects a confusion of means with ends. Public efforts to maintain competition are properly designed, not to sustain rivalry for its own sake, but to gain the advantages of competition in the form of improved products, better services and lower prices. It is in these terms that the degree and form of competition should be appraised in framing public policy.

The Court's conception that reliance upon competition is even more important in a regulated than in an unregulated industry is, in the author's view, mistaken. In fashioning public policy for any industry, there is a basic choice to be made between reliance upon private decision-making and reliance upon public decision-making. While the allocation of these powers may appropriately vary among industries, it is not sensible in any industry to lodge identical powers both with government and with the individual. The powers involved in this case are those relating to the expansion of banks through merger, but in a fundamental sense the powers relating to entry and internal expansion are also affected by the principles which the Court enunciated.

The antitrust laws are an integral part of a public policy which places essential reliance upon private decision-making. So that the competitive forces may operate

effectively, and thus be relied upon, these laws are designed to preserve freedom of entry into the industries to which they apply, and to sustain broad discretion to expand within those industries. Under the antitrust laws, public intercession in the decision-making process takes place only at certain defined outer limits relating to the degree and the form of expansion by individual firms. Within those outer limits, the discretion of the private entrepreneur is complete.

In the regulated industry of banking the reverse is true. Public intercession in the decision-making process takes place at each stage of bank formation and expansion through branching or merger. Private entrepreneurs are not permitted to enter the banking industry without the consent of the public authorities. Where they are allowed to enter, they may branch or merge only with the approval of the public authorities. While private entrepreneurs are left with the choice whether to seek entry into banking, or to seek expansion of their banking operations, the ultimate decision on bank entry and bank expansion through branching or merger is assigned to the public authorities. There does remain a broad area within which banks have some discretion in their operating policies and practices, but they have none with respect to the final choice of new bank formation or expansion through branching or merger.

The role of competition as an economic regulator, to which the Court refers, is not the same in the regulated as in the unregulated industries. Moreover, contrary to the Court's view, this role of competition is necessarily less significant in the regulated industries. Competition could perform as an economic regulator with respect to bank formation and bank expansion only if there were complete freedom to enter the industry and to expand within the limitations set by the antitrust laws. If it were our public purpose to apply this philosophy, there would be no reason for empowering public authorities to regulate the formation of new banks or the branching or merging of existing banks. Indeed, such intercession of public authority could, under that philosophy, be regarded as anticompetitive, in the sense that it would prevent the expression of competitive forces.

Where entry into an industry is restricted for the private entrepreneur, he does not have the full discretion to commit his capital according to his own assessment of alternative profit prospects, and other means have to be found to assure the proper flow of capital to the variety of its potential uses. This objective is accomplished by applying public standards administered by public authorities. Private and public controls represent alternative, and not complementary, approaches to the allocation of capital resources. To charge the public authorities with responsibility for regulating the flow of capital according to publicly-determined standards, while at the same time endeavoring to apply the antitrust concept of reliance upon private decisions to make these determinations, is to create a clash between public and private decision-making. This is precisely the consequence of the Court's decision in this case.

In dealing with the problem of maintaining competition in the face of a high degree of governmental regulation of commercial banking, the Court takes the position that the adverse consequences of concentration are probably more "inimical" in banking than in other service industries (pages 368-369). There is merit in the Court's argument that concentration in banking may have broad repercussions on concentration in industry generally. However, bank concentration through mergers is under direct public control. Moreover, bank concentration, unlike concentration in the unregulated industries, is also affected by controls over entry and internal expansion—mak-

ing it still more difficult to apply antitrust concepts to this industry.

Since bank regulation does not reach every aspect of bank operations, it may appear that antitrust concepts are properly applicable at least to those operations of banks which are not touched by direct public controls. But even this is doubtful. The competition which prevails in the banking industry is affected not only by the restrictions over entry and expansion, but also by the intimate public controls imposed over lending and investment practices, and by the interest-rate limitations which are applied. Public standards govern the application of these controls, and private restrictive actions by banks could defeat these regulatory aims. It would thus appear that the safeguarding of regulatory objectives, rather than the maintenance of competition according to antitrust concepts, is the proper basis throughout for the regulation of competition in banking.

In reaching its conclusion that the antitrust laws are applicable to banking, the Court cited the fact that the Comptroller of the Currency is not required under the Bank Merger Act to accord any particular weight to the competitive factors in merger cases (page 351). It would seem more reasonable to interpret this aspect of the Bank Merger Act as evidence that the Congress did not intend to accord the competitive considerations in bank mergers the same status that they have been given in other industries under the antitrust laws. The fact that the bank regulatory agencies are required to reach their decisions in terms of the public interest, taking account both of banking and competitive factors, would appear to support this latter view.

II. *Economic Implications*

There are also in the Court's decision, economic implications of broader applicability.

A. Undue Concentration and Tendencies Toward Monopoly

In grappling with the problem of determining the tolerable degree of concentration under the antitrust laws, the Court states that:

> . . . a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market, is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects (page 363).

Such a test of illegality under the Clayton Act, the Court contends, ". . . is fully consonant with economic theory." In support of this contention, the Court cites the view of economists that competition is likely to be greatest when there are many sellers, none of which has any significant market share. Developing this thought further, the Court dismisses the evidence of alternatives open to bank customers with the observation that "In every case short of outright monopoly, the disgruntled customer has alternatives; even in tightly oligopolistic markets, there may be small firms operating" (page 367). Finally, at page 369, the Court expresses the view that a reduction in the number of banks in a locality will diminish the vigor of competition.

Taken together, these observations would seem to imply that the ideal to be sought under our antitrust laws is to create and sustain conditions of "pure" competition, under which the number of suppliers in an industry, and the nature of the product or service vended, is such that no firm can exercise any influence on price.

These concepts, which were developed by economists for analytical purposes, are of little use in determining public policy toward competition. There is probably no industry in our economy which today

would fulfill the requirements of "pure" competition. Oligopoly is probably the norm—and we could alter this condition only by fragmenting every industry to the point that would seriously impair the realization of the cost advantages of larger-scale operations, by outlawing the practices through which products are identified according to their individual suppliers, and perhaps also by restricting product diversification.

Not every diminution in the number of competitors is likely to be publicly harmful; nor will it always be publicly beneficial to maximize the number of competitors. There are opportunities to obtain public benefits through larger-scale enterprise, through product diversification, and through the identification of product sources—and it is to the attainment of these benefits that public policy should properly be addressed. The number of firms in an industry, and the degree of concentration, are not the sole determinants of the outcome of competition in these terms. The task is to weigh the prospective gains and losses from concentration and other business practices, and to seek an outcome most beneficial in terms of the public interest.

It is understandable that the Court, in applying the antitrust laws, has reached for rules-of-thumb in terms of percentage-concentration. But although this may represent a comfortable haven, it does not provide a sufficient basis for public policy. Particularly questionable is the Court's use of aggregate data for the banking industry as a whole, as evidence of the degree of concentration which prevails (pp. 325-326). Such data throw no light on the concentration which exists in individual markets, and these are the only relevant figures for assessing the competitive effects of concentration.

Tendencies toward monopoly, the Court states at page 367, must be arrested *before* the consumer's alternatives disappear through mergers. Taken in conjunction with the Court's observations on the maximization of the number of competitors, this would seem to imply that all mergers should be denied, which would clearly be no standard at all. Although it is true that successive small increases in concentration may not individually appear harmful, and yet eventually produce an undesirable degree of concentration—it is in the public interest to be discriminating enough to allow concentration where it is beneficial and to forbid it where it is harmful. The difficulties are more problems of administration than of policy.

B. The Relevant Market Area

The principle according to which the relevant market area was chosen in this case carries serious dangers of perverse results. In an effort to find a "workable compromise," the Court at page 361 selected an essentially local test of concentration. If this test were generally applied, it would be possible to realize the economies of scale only in market areas of such size that little local concentration would result. The severe branching restrictions applied to banks in many States exacerbate this problem. The effect would be to produce greater rather than less reliance upon a few very large financial centers for certain banking services. This would promote rather than restrict the concentration of financial power.

At page 370 the Court dealt with this problem in another way, but with similar implications. It approved of mergers of small firms to compete more effectively with the leaders in the industry, but disapproved of mergers which would produce firms of a size comparable to those leaders. Such a policy would preserve the power of those now large. Although there is a proper public concern to prevent harmful accretions of industrial power, this aim cannot be achieved through a general caveat against the for-

mation of additional units of the size of the industry leaders.

The Court was indeed faced with a difficult choice in determining what weight to accord the requirements of business firms needing larger borrowing facilities. But to ignore entirely the greater competition in providing these facilities which could be produced through the formation of additional larger financial institutions, as the Court did, is no proper solution to this problem. The Court's concern to preserve a range of alternative choices for consumers was not applied in its observation that business firms in the Philadelphia area which find the lending limits of local banks insufficient to meet their needs could obtain bank credit in other cities (page 371).

C. *De novo* Branches vs. Mergers

The Court at page 370 rejects as a proper justification for mergers, the desire of banks to follow their customers to the suburbs. Departing from its self-imposed ban against the expression of value judgments, the Court found that ". . . corporate growth by internal expansion is socially preferable to growth by acquisition." Such an unqualified rule against expansion through merger is extremely difficult to support. We know from experience that some banks in suburban communities may not be capable of surviving the competition of additional *de novo* branches by larger metropolitan banks. In other cases, problems such as management succession, management competence, capital adequacy, the limited size of operations, or a declining local economy, may make it difficult for a bank to serve its community with full effectiveness. Moreover, in States which provide home office protection, *de novo* branching may not be feasible. Merger, in some of these cases, may be the only proper course in the public interest. Administrative discretion in such matters would seem the more appropriate policy.

Concentration Ratios and Competition

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This paper will be concerned neither with the merits of the proposed merger between Philadelphia National Bank and Girard Trust, nor with the legal aspects of the Supreme Court's recent decision which held that the merger was illegal. The purpose of the essay is to point out the proper uses and improper abuses of concentration ratios as guides to public policy in the field of banking regulation. Since so much stress was placed upon concentration ratios by the Supreme Court in this case, some useful purpose may be served by an analysis of this kind.

In the Philadelphia decision, we are informed that recent years "have witnessed a definite trend toward concentration" of banking in the United States. This quotation can only be interpreted to mean that the Court considers the decline in the aggregate number of banks in the country as a whole a significant and useful statistic. It should be clear, however, that (1) concentration ratios, even when derived for the relevant market area, are poor indicators of the state of competi-

tion, and (2) it is poor economics to conclude that a decline in the number of banks in the nation *necessarily* and inevitably reduces the strength of competitive forces.

I. *The Trend of Concentration in Banking*

While we do not place much faith in concentration ratios as guides to appropriate regulatory policies, the Court's implication that there has occurred a widespread, general and pervasive increase in the concentration of bank assets in relevant banking markets should not go unchallenged. The facts are otherwise.

A recent study of forty-six major banking markets in the United States[1] reveals a stronger tendency toward *reduction* in bank concentration than toward increased concentration. Since the results of this study run counter to the notion held by the Court, its major conclusions are outlined below.

The period 1939-1959 was selected for measuring changes in the concentration of bank assets in the forty-six major metropolitan areas examined in this study. Following usual procedure, the ratio of the largest bank's total assets to total assets of all commercial banks in the market was derived for both 1939 and 1959.

Increases in the concentration ratio of the largest bank occurred in fourteen areas, while decreases were observed in thirty-one. Furthermore, the distribution of largest banks controlling various percentages of total metropolitan area bank assets reveals the following interesting points:

(1) In three areas the largest bank controlled more than 70% of area assets in 1939. By 1959, no area had this degree of concentration.

(2) In 1939, the largest bank held more than 60% of total bank assets in seven metropolitan areas. In 1959, only one area had a bank of this size relative to the total bank assets.

(3) In thirteen metropolitan areas the largest bank controlled more than 50% of area bank assets in 1939. Twenty years later this was the case in only eight.

(4) The number of areas in which the largest bank controlled *less* than 40% of total assets *increased* during the period from twenty-one to twenty-four.

These statistics do not support the Court's assertion that generalized increases in concentration have taken place.

The market share of the two largest banks in the forty-six areas studied increased substantially in nine cases, declined markedly in twenty-five cases, and showed nominal change in the remaining twelve.

Taking the market share of the three largest banks in the sampled area, we find that concentration increased in slightly more than a third of the cases between 1939 and 1959, but declined in the large majority of cities. With a very small difference in percentage, the four-bank share results followed the pattern observed for the three-largest-bank test discussed above.

The Court also implied that a movement toward concentration feeds upon itself; that is to say, mergers generate mergers within local market areas. Preliminary investigation of this hypothesis, using a small number of major cities, (14), reveals no significant correlation between changes in concentration in a given period and in a subsequent period. Nor did the investigation show a significant correlation between the level of concentration on a particular date and subsequent changes in concentration. These studies are not conclusive, since they

[1] Deane Carson and Paul Cootner, "The Structure of Competition in Commercial Banking" in *Private Financial Institutions*, forthcoming volume of the Commission on Money and Credit.

cover only randomly selected large cities,[2] but the fact remains that in the major banking markets no clear-cut evidence to support the Court's position exists.

II. *Concentration Ratios and Competition*

The appearance of high concentration ratios in banking markets may result from any one of a number of factors. The specification of these can provide clues to the relationship between concentration and the state of competition in such markets, and will further demonstrate the need for caution in drawing conclusions from the data.

As suggested previously, the most obvious reason for an observation of high concentration derives from the observor's choice of (1) product line, (2) market area and (3) institutional constraint. For example, while the concentration ratio for "loans in the United States" is very low, one can generate successively higher ratios by simply defining these characteristics in even more restrictive terms. "Home loans of state non-member banks in Chapin, Illinois" are, with almost perfect certainty, concentrated in a single commercial bank. Yet a concentration measurement based upon either of these examples would be essentially meaningless as a guide to an assessment of the state of competition. There is not, in fact, anything remotely resembling a national market for all loans, which condemns the first measurement. The second is uninformative on other grounds: the market area and institutional constraint are both too narrowly defined to be useful in measuring the strength of competitive forces. We do not know whether monopoly exists or not on the basis of the observed concentration ratio.

Of course, what is needed is a realistic definition of the product, the market area, and the institutions that are part of that market. These matters are considered in some detail and with special reference to the Philadelphia decision in a subsequent section. At this point we wish to push the analysis of concentration ratios in relation to competition one step further.

Large banks tend to be active on several levels geographically, supplying funds and providing services in local, national and international markets. The competitive effect of a merger between two medium- or large-size banks will thus be somewhat different in each of the markets in which the banks operate. This raises the distinct possibility that such a merger can have opposite competitive effects, increasing competition in one or more markets, while reducing competition in one or more others. Thus a merger might be on balance a boon to competition, although tending to reduce competitive forces in some other lines or markets —and, of course, the opposite situation could prevail. This complication, as we shall see, was dealt with by Congress by amending the Clayton Act in 1950, but in a fashion that seems to ignore rather than resolve the dilemma.

Concentration ratios may prove hazardous in evaluating market competition on yet other grounds. They tell us nothing about the history and the dynamics of bank growth. A bank may be dominant in a community for literally hundreds of reasons which have some bearing on the state of competition. We need mention only a few of these to demonstrate the point we wish to make.

(1) The dominant bank may have reached its present position because of a lack of initiative on the part of competitors, potential and actual. It should be recognized that the regulatory authorities cannot *initiate* new bank formation in a community, nor can they very easily prevent aggressive action on the part of one

[2] Atlanta, Baltimore, Boston, Chicago, Cleveland, Dallas, Detroit, Kansas City, Minneapolis, New York City, Philadelphia, Pittsburgh, Richmand and St. Louis.

institution and passivity on the part of others.[3]

(2) The dominant bank (or banks as the case may be) may have reached its position through cost reducing innovation, superior service, friendlier vice-presidents, more aggressive searching out of loan opportunities, and for many other rational and irrational reasons that motivate customers to choose one bank rather than another.

(3) The dominant bank or banks may have reached the present state of concentration through mergers and (where permitted) aggressive branching into areas of new loan demand and new supplies of funds. This may or may not have been accompanied by a diminution in effective competition. Available studies do not permit us to conclude that the concentration ratio is negatively correlated with the quality of bank services and positively correlated with bank costs and prices. Further research into these matters is clearly needed, however.

(4) Finally, high concentration in a relevant market area may appear because of the limited extent of the market. There are many one-bank towns in the United States that probably could not support additional facilities. In these areas, the existing bank may or may not be serving the needs of the community in a fashion that would obtain under conditions of effective competition.

III. *Defining the Market*

There are several problems involved in calculating a concentration ratio in a manner that is useful for anti-trust purposes. The test of the lawfulness of a merger under the Clayton Act is whether the effect of the merger "may be substantially to lessen competition" "in any line of commerce in any section of the country." There are two major problems in applying this test: what is the relevant "line of commerce," and what is the relevant "section of the country."

A. Line of Commerce

The Supreme Court, in the Philadelphia National Bank case professed to have no difficulty in determining the relevant line of commerce:

> We have no difficulty in determining the "line of commerce" (relevant product or services market) . . . in which to appraise the probable competitive effects of appellees' proposed merger. We agree with the District Court that the cluster of products (various kinds of credit) and services (such as checking accounts and trust administration) denoted by the term "commercial banking," . . . composes a distinct line of commerce. (Page 356)

It is quite clear that commercial banks do deal in a wide range of services and products, and also face a substantial amount of competition from non-bank financial institutions. Commercial banks are not products, nor are "total deposits," "total assets" or even "total loans." It is a more reasonable approach to the competitive problem to examine *each* of the relevant product lines and determine whether the merger will result in a substantial lessening of competition in the market for that product.

In examining the market for *real estate loans*, for example, it would be desirable to consider not only the amount of business done by the merging banks and the other commercial banks, but also the mortgage loan business done by mutual savings banks, savings and loan associations, and insurance companies. The same is true in the *personal loan* field, where commercial banks face intense competition from personal finance companies, sales finance companies and credit unions.

[3] In some cases, a bank may achieve a dominant position due to the parsimony of the regulatory authorities in granting new bank charters.

Business loans generally make up the bulk of commercial bank loans, but here also there is considerable competition with other institutions. Savings and loan associations and mutual savings banks make real estate loans to business firms. Finance companies and factors make loans on receivables and equipment. Insurance companies are strong competitors in the large business loan field. Even non-financial firms must be considered, as they extend trade credit to their customers. Trade credit is a particularly important alternative to bank loans for small firms.[4]

The one product line in which commercial banks face no direct competition from other financial institutions is in the handling of demand deposits. Even here, however, there are substitutes. Currency, of course, is one alternative. Many savings banks and savings and loan associations sell Register checks, as do some supermarkets.[5] Traveler's checks are another alternative, as are postal money orders. The store-of-value function of demand deposits is performed as well, or better, by savings accounts, savings bonds, and other investment instruments.

The Court's justification for disregarding non-bank competition is that commercial banking products or services enjoy "such cost advantages as to be insulated within a broad range from substitutes furnished by other institutions" (Page 356). As an example, the Court points out that in competing with small loan companies in the personal loan market, commercial banks have a considerable advantage in that their rates are invariably lower. Nevertheless, there is competition between commercial banks and small loan companies, and perhaps more important, competition of both with credit unions and sales finance companies which charge rates comparable to those of the commercial banks.

The Court counters this consideration with the argument that even where there are non-bank facilities competing in terms of price and cost with commercial banks, the banks "enjoy a settled consumer preference, insulating them, to a marked degree, from competition; this seems to be the case with savings deposits" (Page 357). Commercial banks do, of course, have some advantages in competing with other savings institutions. The convenience of "one-stop banking," inertia, or lack of knowledge may lead a savings depositor to maintain an account at a commercial bank while a savings bank across the street is paying a somewhat higher interest rate. But this does not mean that there is no competition between the two institutions. The depositor who may not cross the street for an extra one-fourth per cent may do so for an extra one-half per cent. The many commercial banks which have raised their time deposit rates in recent years have not all done so simply because of competition from other commercial banks.

Appropriate economic analysis of a proposed bank merger, then, would seem to require an analysis of the impact on competition in each of the relevant product or services provided by commercial banks, taking account of competition from non-bank institutions, and taking account of the substitutability among financial services.

B. Section of the Country

The Court also found "no difficulty in determining the . . . 'section of the country' (relevant geographical market) in which to appraise the probable competitive effects" of the merger. The Court

[4] See V. C. Andrews, S. Friedland, and E. Shapiro, "Who Finances Small Business," in *Financing Small Business*, Federal Reserve System, 1958.

[5] Since most supermarkets cash checks (on a more liberal basis, often, than banks) many families can conduct all of their "banking" business at the local supermarket.

argued that convenience of location is important in banking competition:

> Individuals and corporations typically confer the bulk of their patronage on banks in their local community; they find it impractical to conduct their banking business at a distance. . . . . The factor of inconvenience localizes banking competition as effectively as high transportation costs in other industries. (Page 358)

The Court then concluded that, because of the convenience factor, "(t)he four-county area in which appellees' offices are located would seem to be the relevant geographical area" (Page 359). As further evidence supporting this decision the Court points out that "(t)he vast bulk of appellees' business originates in the four-county area" (Page 359).

A reinforcing consideration to which the Court evidently gave significant weight was the fact that the four-county Philadelphia metropolitan area was one "which state law apparently recognizes as a meaningful banking community in allowing Philadelphia banks to branch within it" (Page 361).

It follows from the analysis of the preceding section that a single geographical area cannot be chosen as the relevant market area in which to measure competition. The relevant market area differs for each banking product or service. The relevant market area for personal checking accounts is probably a small one and the four-county area may be a reasonably good choice.[6] The relevant market for large business loans, however, is a national one. Philadelphia banks compete in this market with banks in San Francisco and Chicago as well as those in Pittsburgh and New York.[7]

The market for small and medium-size business loans is more difficult to define precisely. Small firms are generally confined to a small geographical area in seeking funds, both by the cost of traveling and lenders' lack of knowledge of their business. Thus an appropriate consideration would be the effect of the merger on competition for small business loans in the four-county area, making allowance for banks and other institutions on the fringe of the area.

The Court's use of state branch banking restrictions as an aid in delineating the relevant market area seems to give an inappropriate emphasis, in an evaluation of competition, to state laws which are basically anticompetitive. Apparently, if the banks had offices throughout the state, or if they had offices in New York and New York banks had offices in Philadelphia, the Court would have found a much larger geographical area to be the relevant market.

IV. *Summary*

To discover the state of competition in a given market, one must consider a set of factors much broader than concentration ratios. At best, the latter confirm the generally acknowledged fact that the banking business conceived on a narrow geographic basis tends to yield an oligopolistic market structure; at worst, they can mislead even philosopher kings.

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[6] It should be noted, however, that with the development of banking by mail, individuals are not restricted by convenience considerations to banks in their immediate neighborhood. Many individuals maintain checking accounts at banks hundreds of miles from their homes because of the attraction of low (or no) service charges. Saving by mail is quite common. Nevertheless, 93% of Philadelphia National Bank's demand deposits of individuals originate in the four-county area. The comparable figure for Girard is 87%.

[7] Thus only 54% and 63% of the business loans of Philadelphia National and Girard are to firms located in the four-county area.

Current Banking and Economic Developments

In this section, which will appear regularly in the REVIEW, *there will be presented current analyses of significant banking and economic developments and selected statistical data. So as to provide a broader perspective, certain of the statistical data presented in this first issue of the* REVIEW *cover a longer period. The other statistical data carry forward series presented in the* ANNUAL REPORT *of the Comptroller of the Currency. From time to time particular developments will be explored more intensively, and the discussion will be broadened to cover related developments in other fields.*

The first half of 1963 saw moderate increases in general economic and banking activity. The minor increase (1.3 per cent) in the money supply, seasonally adjusted, was associated with a 2.5 per cent rise in Gross National Product (the market value of all goods and services produced) between the last quarter of 1962 and the second quarter of 1963. More than two-thirds of this rise represented an increase in real output with the remainder reflecting price increases. Industrial production increased 6.2 per cent between December 1962 and July 1963. The seasonally adjusted rate of unemployment in July (5.6 per cent of the civilian labor force) was slightly higher than in July or December 1962. The balance of payments situation continued to hold a key position in national monetary affairs: beginning in mid-July, the twelve Federal Reserve Banks raised their discount rate to 3.5 from 3 per cent, the rate which had prevailed for nearly three years; the maximum rate that banks are permitted to pay on time deposits and certificates with maturities of 90 days to one year was raised to 4 per cent; and the President proposed an interest equalization tax on the sale of foreign securities in the United States and authority to borrow $500 million in foreign currencies from the International Monetary Fund.

I. *Asset Structure*

As a result of improved techniques for processing reports of condition submitted by national and state member banks, final data from the June 1963 "call reports" are available sooner than for any previous call report. Between the December 1962

and June 1963 reports of condition, assets of national banks rose at a slow pace (1.3 per cent)—equal to the rise in the money supply—to a level of $162.7 billion. Nevertheless, this is the first time in four years that there was a rise between December and June. In each of the previous three years, assets of national banks declined during the December-June period. During this six months period, assets of state member banks declined (.4 per cent), but less than for any of the three previous similar periods. For various reasons, including seasonal patterns, assets have risen more in the June-December period. This becomes clearer when we see that, for the year ending in June 1963, assets of national banks rose by 8.8 per cent, or a little less than between June 1961 and June 1962, when the rise was 8.9 per cent. State member banks' assets rose much slower in the last year (6.9 per cent) than in the previous June to June (8.4 per cent).

Within the aggregate of total assets, securities and loans and discounts are two of the more important categories. Security holdings of national banks were virtually unchanged for the six months ending in June 1963, when they held $51.8 billion. State member banks' holdings rose by 1.2 per cent to $25.6 billion. Both groups of commercial banks shifted their holdings of securities in a similar manner over the December 1962-June 1963 period: there was a continuation of the previous reduction in the share of securities held in the form of U. S. government obligations to 65.7 per cent for national banks and 63.9 per cent for state members; within the U. S. governments were two diverse factors—a decline in the short-term maturities and a rise in the longer-term securities, mainly those maturing in 5 to 10 years. National banks' holdings of other securities, mainly tax-exempt obligations of state and local governments, continue to rise both as a fraction of securities held and in dollar terms. For the year ending June 1963, national banks increased their holdings of obligations of state and local governments by $1.6 billion or 11.5 per cent. This portfolio shift has often been associated with the higher interest costs incurred by commercial banks in connection with time and savings deposits.

In line with competing institutions, national banks have increased their "real estate" loans, which reached a level of $20.1 billion in June. This was a rise of 14.4 per cent over the year. This sharp increase reflects a combination of factors: enlarged opportunities due to a strong construction market, an increased volume of time and savings deposits, and a quest by banks for new and additional opportunities to lend their resources.

II. *Deposits*

Since deposits constitute about 90 per cent of the liabilities of national banks, changes in total assets are usually quite similar to changes in deposits. Total deposits (demand plus time and savings) rose by 1.9 per cent for national banks and .6 per cent for state member banks between the December 1962 and the June 1963 reports of condition. Both classes of commercial banks had similar movements in demand deposits (national banks had a decline of 2.3 per cent and state member banks a 3.2 per cent decline) and savings deposits (national banks saw a rise of 8.2 per cent and state member banks a rise of 8.0 per cent). National banks and state member banks had a much sharper rise in total deposits during the second half of last year, due mainly to 7.4 and 5.7 per cent increases in demand deposits, respectively. Time deposits grew at a faster rate in the first half of this year than during the second half of last year, 5.8 per cent for national banks and 6.5 per cent for state members. Significant factors in the continuation of the rise in time deposits at commercial banks have been the ability of commercial banks to compete for these de-

posits by paying competitive rates, and the higher rate of savings, 7.5 per cent of disposable personal income.

The fraction of total deposits held in time deposits continued to increase. In June 1963, 40.3 per cent of the deposits of national banks were in time deposits (up from 37.7 per cent in December 1962); the same picture holds for state member banks where time deposits rose to 36.7 per cent of total deposits in June 1963, up from 34.2 per cent for the previous December.

SHERMAN SHAPIRO

Selected Statistical Data

Table No.	*Title of Table*
1	Total and principal assets of national banks, by states, June 29, 1963
2	Selected liabilities and capital accounts of national banks, by states, June 29, 1963
3	Selected holdings of U.S. Government obligations held by national banks, by states, June 29, 1963
4	Selected loans and discounts of national banks, by states, June 29, 1963
5	Status of applications for national bank charters as of June 30, 1963, and charters issued January 1-June 30, 1963
6	Insured banks chartered, by type of bank and state, annually 1953-62 and January 1-June 28, 1963
7	*De novo* branch applications of national banks, by states, January 1-June 28, 1963: received, approved, rejected, abandoned, and pending as of June 28, 1963
8	Branches of national banks: opened for business, discontinued or consolidated, January 1-June 28, 1963, and branches in operation December 31, 1962 and June 28, 1963
9	Branches of national banks authorized, January 1-June 28, 1963, by community population and size of bank
10	*De novo* branches of insured commercial banks opened for business, by type of bank and state, annually 1953-62, and January 1-June 28, 1963, and January 1, 1953-June 28, 1963, inclusive
11	Mergers, January 1, 1963-June 28, 1963

Table 1.—Total and principal assets of national banks, by states, June 29, 1963

(Dollar amounts in millions)

ASSETS

State	Total Assets	Cash Assets [1]	U.S. Gvt. obligations, net	State and local securities, net	Other bonds, notes, net	Loans and discounts —net
United States	$162,748	$28,641	$34,011	$15,174	$2,164	$78,383
Alabama	1,918	374	407	202	20	875
Alaska	208	27	55	10	8	102
Arizona	1,348	185	173	77	2	859
Arkansas	881	181	172	103	14	393
California	23,095	3,634	3,993	1,973	305	12,378
Colorado	1,900	364	411	106	6	960
Connecticut	1,538	269	217	205	14	793
Delaware	20	3	6	1	**	9
Dist. of Col.	1,099	201	322	54	4	494
Florida	4,049	834	1,103	317	74	1,588
Georgia	2,054	447	326	140	17	1,071
Hawaii	355	61	73	20	1	184
Idaho	566	67	126	49	3	308
Illinois	15,685	2,621	3,679	1,606	383	7,071
Indiana	3,601	696	951	226	63	1,596
Iowa	1,238	273	275	103	15	549
Kansas	1,654	307	423	184	25	689
Kentucky	1,255	245	327	105	16	539
Louisiana	2,318	488	597	183	14	988
Maine	407	56	77	30	4	230
Maryland	1,627	307	360	122	22	779
Massachusetts	4,609	930	774	286	35	2,449
Michigan	6,252	960	1,518	691	31	2,927
Minnesota	3,609	690	747	250	70	1,761
Mississippi	504	94	111	57	3	228
Missouri	2,669	579	555	200	18	1,272
Montana	507	77	121	37	12	247
Nebraska	1,402	280	268	95	16	719
Nevada	420	52	86	49	3	212
New Hampshire	389	66	76	24	2	213
New Jersey	5,290	681	1,176	712	95	2,520
New Mexico	620	110	165	29	2	300
New York	16,861	2,921	2,988	1,869	190	8,174
North Carolina	1,323	276	194	91	26	703
North Dakota	458	58	124	40	11	212
Ohio	7,554	1,235	1,767	684	87	3,637
Oklahoma	2,811	618	679	211	36	1,209
Oregon	2,163	314	422	192	19	1,153
Pennsylvania	11,442	1,659	2,517	1,764	153	5,103
Rhode Island	626	73	72	103	3	361
South Carolina	798	162	175	53	7	380
South Dakota	517	65	135	30	9	264
Tennessee	3,001	634	599	217	39	1,458
Texas	11,980	2,759	2,427	901	149	5,397
Utah	582	99	73	52	5	343
Vermont	244	28	55	17	2	137
Virginia	2,510	385	504	210	51	1,307
Washington	3,053	521	600	247	26	1,573
West Virginia	886	153	296	53	10	358
Wisconsin	2,473	464	619	173	41	1,123
Wyoming	353	54	90	21	3	175
D. C.—all*	2,011	347	562	83	11	971

* Includes national and nonnational commercial banks in the District of Columbia, all of which are supervised by the Comptroller of the Currency.
** Less than $500,000.
[1] Cash, balances with other banks, and cash items in process of collection.

Table 2.—Selected liabilities and capital accounts of national banks, by states, June 29, 1963

(Dollar amounts in millions)

State	LIABILITIES			CAPITAL ACCOUNTS				
	Total Liabilities	Demand deposits, IPC	Time deposits, IPC	Total Capital Accounts	Common stock	Surplus	Undivided profits	Reserves
United States	$149,740	$63,256	$54,055	$13,008	$3,846	$6,526	$2,331	$281
Alabama	1,755	829	558	163	49	72	31	12
Alaska	197	73	55	12	5	4	3	1
Arizona	1,261	535	511	87	24	46	15	3
Arkansas	810	401	238	71	23	31	16	2
California	21,592	7,857	9,857	1,503	421	789	283	10
Colorado	1,747	808	601	153	51	68	32	1
Connecticut	1,415	751	371	122	37	64	20	1
Delaware	18	8	9	2	1	1	**	**
Dist. of Col.	1,016	620	288	83	22	41	16	4
Florida	3,718	1,732	1,110	331	125	156	39	10
Georgia	1,883	935	420	172	44	82	27	18
Hawaii	325	123	108	30	9	14	5	2
Idaho	524	219	214	41	14	19	7	2
Illinois	14,403	5,863	5,349	1,282	426	621	180	55
Indiana	3,303	1,492	1,029	298	77	151	62	8
Iowa	1,137	500	336	101	26	46	28	2
Kansas	1,506	683	378	148	45	67	34	2
Kentucky	1,142	631	303	113	29	60	23	2
Louisiana	2,124	998	542	194	46	107	41	**
Maine	367	167	146	39	15	15	9	1
Maryland	1,494	705	472	132	35	73	19	5
Massachusetts	4,160	2,256	821	449	112	255	64	19
Michigan	5,833	2,126	2,525	419	118	215	75	8
Minnesota	3,319	1,249	1,195	290	85	140	61	5
Mississippi	464	201	138	39	10	27	2	**
Missouri	2,443	1,168	634	226	70	97	52	7
Montana	471	203	182	36	13	14	8	**
Nebraska	1,278	657	299	124	37	51	33	3
Nevada	390	162	143	30	15	12	3	**
New Hampshire	350	188	85	38	8	20	9	1
New Jersey	4,900	1,952	2,242	390	120	198	64	8
New Mexico	576	260	164	44	16	16	4	8
New York	15,483	6,141	5,424	1,379	417	680	253	9
North Carolina	1,216	613	279	107	31	60	15	1
North Dakota	425	185	178	33	11	14	7	**
Ohio	6,935	2,817	2,726	619	183	330	103	3
Oklahoma	2,555	1,253	659	256	70	104	78	4
Oregon	1,998	806	858	166	51	62	53	**
Pennsylvania	10,355	4,104	4,558	1,087	264	655	158	9
Rhode Island	576	196	292	50	14	26	10	**
South Carolina	733	448	112	65	16	36	12	1
South Dakota	480	202	180	37	13	16	8	**
Tennessee	2,771	1,053	900	230	67	120	39	5
Texas	10,986	5,179	2,890	994	358	451	157	28
Utah	535	200	230	47	13	23	7	2
Vermont	223	68	133	21	7	8	4	1
Virginia	2,294	960	922	216	62	118	35	2
Washington	2,819	1,252	1,056	234	71	101	61	1
West Virginia	801	347	298	85	21	42	17	4
Wisconsin	2,286	949	905	187	47	91	42	7
Wyoming	324	124	122	29	5	16	8	1
D. C.—all*	1,866	1,112	564	145	37	75	27	6

* Includes national and nonnational commercial banks in the District of Columbia, all of which are supervised by the Comptroller of the Currency.

** Less than $500,000.

Table 3.—Selected holdings of U.S. Government obligations held by national banks, by states, June 29, 1963

(Dollar amounts in millions)

U. S. GOVERNMENT OBLIGATIONS

State	Treasury bills	Certificates of indebtedness	Treasury Notes	U. S. nonmarketable bonds	Other U. S. bonds maturing within 1 year	Other U. S. bonds maturing 1—4.9 years	Other U. S. bonds maturing 5.0—9.9 years	U. S. bonds maturing after 10 years
United States	$4,024	$1,721	$13,114	$160	$723	$5,469	$8,011	$722
Alabama	65	26	161	2	21	77	53	2
Alaska	7	1	17	3	**	6	19	1
Arizona	40	4	44	**	1	35	46	**
Arkansas	22	6	62	1	2	24	51	4
California	431	158	1,523	13	111	645	1,017	86
Colorado	97	43	131	1	11	53	72	4
Connecticut	40	19	100	1	3	25	26	1
Delaware	2	**	1	**	**	2	1	**
Dist. of Col.	50	6	108	6	3	76	72	2
Florida	121	78	379	5	15	153	325	26
Georgia	33	18	169	1	10	31	62	1
Hawaii	1	**	41	**	**	16	16	**
Idaho	10	4	78	**	1	12	19	**
Illinois	578	103	1,377	16	58	572	923	50
Indiana	152	39	349	5	26	175	193	12
Iowa	23	13	110	2	8	59	57	2
Kansas	69	31	141	3	13	77	82	7
Kentucky	38	19	133	1	13	70	49	3
Louisiana	61	39	249	2	6	121	102	15
Maine	17	6	33	1	1	7	12	1
Maryland	26	15	212	2	2	56	41	6
Massachusetts	134	67	305	3	9	75	174	6
Michigan	92	92	625	5	17	178	429	77
Minnesota	60	40	262	3	13	129	213	26
Mississippi	10	7	34	1	8	23	26	2
Missouri	102	62	201	2	10	87	83	8
Montana	8	4	37	**	2	34	32	3
Nebraska	16	22	100	2	12	60	53	3
Nevada	2	1	24	**	2	35	22	**
New Hampshire	11	4	29	**	1	9	20	1
New Jersey	133	37	362	10	9	213	352	60
New Merico	20	5	55	1	4	40	36	4
New York	363	132	1,294	8	21	411	682	73
North Carolina	6	13	88	3	2	32	50	1
North Dakota	9	5	42	1	1	26	36	4
Ohio	185	123	680	6	73	224	438	29
Oklahoma	155	32	215	4	22	102	139	9
Oregon	4	6	61	2	26	118	200	4
Pennsylvania	242	54	1,157	14	46	381	550	73
Rhode Island	9	10	31	**	**	9	13	**
South Carolina	8	10	62	4	7	32	51	**
South Dakota	9	10	59	1	4	27	24	2
Tennessee	74	46	226	2	11	125	111	3
Texas	258	171	848	12	55	424	560	72
Utah	3	7	54	1	1	1	6	**
Vermont	11	1	13	1	1	10	14	4
Virginia	58	34	205	4	7	86	104	5
Washington	56	59	239	2	17	115	103	8
West Virginia	42	13	84	2	9	55	81	10
Wisconsin	50	23	273	2	22	90	153	6
Wyoming	12	1	29	1	4	24	17	2
D. C.—all*	94	24	191	7	3	109	131	3

* Includes national and nonnational commercial banks in the District of Columbia, all of which are supervised by the Comptroller of the Currency.
** Less than $500,000.

Table 4.—Selected loans and discounts of national banks, by states, June 29, 1963

(Dollar amounts in millions)

LOANS AND DISCOUNTS

State	Loans secured by real estate	Loans to financial institutions	Loans to purchase or carry securities	Commercial and industrial loans	Personal loans to individuals[1]
United States	$20,064	$5,851	$2,665	$27,558	$18,212
Alabama	145	54	19	301	289
Alaska	41	**	**	33	32
Arizona	234	42	59	209	186
Arkansas	78	22	7	116	111
California	4,577	799	115	3,941	2,367
Colorado	200	82	23	278	234
Connecticut	213	31	29	242	251
Delaware	5	**	**	1	3
Dist. of Col.	165	82	5	134	101
Florida	318	127	48	550	522
Georgia	162	103	19	392	364
Hawaii	87	4	10	49	27
Idaho	123	7	**	59	69
Illinois	1,193	849	434	3,101	1,192
Indiana	486	117	43	420	464
Iowa	137	25	6	130	106
Kansas	92	41	7	219	149
Kentucky	129	34	6	160	170
Louisiana	149	83	49	449	223
Maine	64	9	3	79	65
Maryland	222	72	23	236	208
Massachusetts	307	275	48	1,219	584
Michigan	1,120	204	86	694	785
Minnesota	423	147	73	660	334
Mississippi	42	7	9	79	74
Missouri	272	161	52	376	329
Montana	67	4	1	61	67
Nebraska	79	36	12	198	142
Nevada	78	11	3	57	57
New Hampshire	47	10	3	75	75
New Jersey	1,051	86	141	571	676
New Mexico	55	32	7	104	73
New York	1,729	700	486	3,634	1,629
North Carolina	83	31	20	294	249
North Dakota	67	1	2	46	45
Ohio	1,137	221	135	936	1,077
Oklahoma	192	88	21	479	279
Oregon	323	99	21	407	229
Pennsylvania	1,674	252	75	1,773	1,160
Rhode Island	160	21	17	101	52
South Carolina	51	26	12	135	136
South Dakota	64	9	2	55	52
Tennessee	184	147	95	527	444
Texas	527	389	316	2,518	1,228
Utah	132	23	16	89	58
Vermont	60	1	1	24	41
Virginia	371	65	23	358	445
Washington	397	129	25	552	338
West Virginia	128	13	4	80	131
Wisconsin	365	77	56	307	257
Wyoming	50	6	2	49	32
D. C.—all*	288	145	21	234	268

* Includes national and nonnational commercial banks in the District of Columbia, all of which are supervised by the Comptroller of the Currency.
** Less than $500,000.
[1] Excludes business and farm loans.

Table 5.—Status of applications for national bank charters as of June 30, 1963,[1] and charters issued January 1-June 30, 1963

Applications carried over from 1962	59
1—Conversion	
58—Primary	
59	
Applications received January 1, 1963 to June 30, 1963	262
14—Conversions	
248—Primary	
262	
	321
Applications approved January 1, 1963 to June 30, 1963	120
12—Conversions	
108—Primary	
120	
Applications rejected January 1, 1963 to June 30, 1963	49
All Primary	
Applications abandoned January 1, 1963 to June 30, 1963	13
All Primary	
Applications pending as of June 30, 1963	139
3—Conversions	
136—Primary	
139	
	321
New national banks chartered: January 1 to June 30, 1963	73

[1] For 1962 data see **Annual Report of the Comptroller of the Currency**, 1962.

Table 6.—Insured banks chartered, by type of bank and state, annually 1953-62 and January 1-June 28, 1963

State		1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1/1-6/28 1963	Total
Alabama	N	0	1	0	0	0	0	0	0	0	0	2	3
	SM	1	0	0	0	1	0	0	0	0	0	0	2
	IN	1	3	5	1	2	1	3	1	0	1	0	18
		2	4	5	1	3	1	3	1	0	1	2	23
Alaska	N	0	0	0	0	0	0	0	0	0	0	0	0
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	0	0	0	2	0	0	2
		0	0	0	0	0	0	0	0	2	0	0	2
Arizona	N	0	0	0	0	0	0	0	0	0	0	0	0
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	1	1	1	2	0	2	7
		0	0	0	0	0	1	1	1	2	0	2	7
Arkansas	N	0	0	1	0	1	0	0	0	0	1	0	3
	SM	1	0	0	1	0	0	0	0	0	0	0	2
	IN	0	2	1	2	0	0	0	1	1	3	0	10
		1	2	2	3	1	0	0	1	1	4	0	15
California	N	1	1	1	0	2	0	0	3	1	5	5	19
	SM	7	3	3	0	0	0	0	0	0	0	0	13
	IN	4	0	4	2	3	0	2	2	9	6	10	42
		12	4	8	2	5	0	2	5	10	11	15	74
Colorado	N	0	0	0	0	0	2	1	1	0	6	7	17
	SM	0	0	0	0	0	0	1	0	0	0	1	2
	IN	3	0	2	2	1	1	2	1	1	2	3	18
		3	0	2	2	1	3	4	2	1	8	11	37
Connecticut	N	0	0	1	0	0	0	0	0	0	1	0	2
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	0	0	0	0	0	0	0	0	2	0	3
		1	0	1	0	0	0	0	0	0	3	0	5
Delaware	N	0	0	0	0	0	0	0	0	0	0	1	1
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	1	1
D. C.	N	0	0	0	0	0	0	0	0	0	1	0	1
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	1	0	1
Florida	N	2	4	3	11	4	3	2	9	2	8	12	60
	SM	0	1	0	1	1	0	0	0	0	0	1	4
	IN	3	4	8	11	4	7	11	7	11	14	8	88
		5	9	11	23	9	10	13	16	13	22	21	152
Georgia	N	0	0	0	1	1	0	1	2	0	0	0	5
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	1	2	3	1	1	0	4	1	1	3	18
		1	1	2	4	2	1	1	6	1	1	3	23

N = National Banks
SM = State Member Banks
IN = Nonmember Insured State Banks

Table 6.—Insured banks chartered, by type of bank and state, annually 1953-62 and January 1-June 28, 1963—Continued

State		1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1/1-6/28 1963	Total
Hawaii	N	0	0	0	0	0	0	0	1	0	0	0	1
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	1	0	0	0	0	1	0	0	0	0	2
		0	1	0	0	0	0	1	1	0	0	0	3
Idaho	N	0	0	0	0	0	0	1	0	0	0	0	1
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	1	0	0	0	0	3	0	0	0	0	4
		0	1	0	0	0	0	4	0	0	0	0	5
Illinois	N	2	4	3	2	2	0	1	1	5	3	1	24
	SM	0	0	0	1	0	0	0	0	0	0	0	1
	IN	3	7	8	6	10	7	10	12	7	22	6	98
		5	11	11	9	12	7	11	13	12	25	7	123
Indiana	N	0	0	0	0	1	0	0	0	1	0	0	2
	SM	0	0	1	0	0	0	0	1	0	0	0	2
	IN	0	1	0	2	0	0	0	0	0	2	0	5
		0	1	1	2	1	0	0	1	1	2	0	9
Iowa	N	0	0	1	1	0	1	0	0	2	1	2	8
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	1	4	2	1	2	2	1	2	0	0	15
		0	1	5	3	1	3	2	1	4	1	2	23
Kansas	N	0	0	0	0	0	0	0	0	2	1	0	3
	SM	0	0	0	0	0	0	1	0	0	0	0	1
	IN	2	0	1	1	0	1	2	0	2	4	0	13
		2	0	1	1	0	1	3	0	4	5	0	17
Kentucky	N	1	0	0	0	0	0	0	1	0	0	0	2
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	2	0	1	0	0	1	1	0	5
		1	0	0	2	0	1	0	1	1	1	0	7
Louisiana	N	2	1	1	0	0	0	1	0	0	3	0	8
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	2	1	4	5	2	4	0	3	2	3	2	28
		4	2	5	5	2	4	1	3	2	6	2	36
Maine	N	0	0	0	0	0	0	0	0	0	0	0	0
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
Maryland	N	0	0	0	0	0	1	2	0	1	1	2	7
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	1	0	0	1	0	0	0	1	3
		0	0	0	1	0	1	3	0	1	1	3	10
Massa-chusetts	N	0	0	0	0	0	1	0	0	0	1	1	3
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	1	1	0	1	0	3	2	3	2	0	13
		0	1	1	0	1	1	3	2	3	3	1	16

Table 6.—Insured banks chartered, by type of bank and state, annually 1953-62 and January 1-June 28, 1963—Continued

State		1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1/1-6/28 1963	Total
Michigan	N	0	0	2	1	0	1	0	0	0	4	2	10
	SM	1	0	0	2	0	1	0	0	0	0	0	4
	IN	2	0	0	0	0	1	1	1	1	0	0	6
		3	0	2	3	0	3	1	1	1	4	2	20
Minnesota	N	1	0	0	1	0	1	0	0	1	1	2	7
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	2	2	3	2	2	3	1	1	0	4	3	23
		3	2	3	3	2	4	1	1	1	5	5	30
Mississippi	N	1	0	1	0	0	0	0	0	0	0	0	2
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	0	0	0	1	0	0	1
		1	0	1	0	0	0	0	0	1	0	0	3
Missouri	N	0	0	1	0	0	0	3	0	0	1	2	7
	SM	0	0	0	0	0	0	0	1	0	0	0	1
	IN	0	2	3	2	1	5	7	3	1	0	1	25
		0	2	4	2	1	5	10	4	1	1	3	33
Montana	N	0	1	1	0	1	0	0	1	0	0	1	5
	SM	0	0	0	0	0	0	1	0	1	0	1	3
	IN	0	0	2	0	0	0	0	4	0	0	0	6
		0	1	3	0	1	0	1	5	1	0	2	14
Nebraska	N	0	0	0	0	0	0	0	0	0	0	1	1
	SM	0	0	0	1	0	0	0	0	0	0	0	1
	IN	1	0	1	1	0	1	1	1	1	2	0	9
		1	0	1	2	0	1	1	1	1	2	1	11
Nevada	N	0	0	0	0	0	0	0	0	0	0	0	0
	SM	0	1	0	0	0	0	0	0	0	0	0	1
	IN	0	0	0	0	0	0	1	0	0	0	0	1
		0	1	0	0	0	0	1	0	0	0	0	2
New Hampshire	N	0	0	0	0	0	1	0	0	0	0	1	2
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	1	0	0	0	0	0	1
		0	0	0	0	0	2	0	0	0	0	1	3
New Jersey	N	0	0	0	0	0	0	0	0	1	3	0	4
	SM	0	0	0	0	0	1	0	2	1	3	0	7
	IN	1	0	1	1	1	2	2	0	0	1	3	12
		1	0	1	1	1	3	2	2	2	7	3	23
New Mexico	N	0	0	0	1	0	1	0	1	0	1	1	5
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	0	0	1	2	3	0	6
		0	0	0	1	0	1	0	2	2	4	1	11
New York	N	0	1	1	2	0	0	0	0	1	0	1	6
	SM	0	0	0	0	1	0	0	0	0	0	0	1
	IN	0	0	0	0	0	0	0	1	0	0	0	1
		0	1	1	2	1	0	0	1	1	0	1	8

Table 6.—Insured banks chartered, by type of bank and state, annually 1953-62 and January 1-June 28, 1963—Continued

State		1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1/1-6/28 1963	Total
North Carolina	N	1	0	0	0	0	0	0	0	0	0	1	2
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	1	0	1	0	0	0	2
		1	0	0	0	0	1	0	1	0	0	1	4
North Dakota	N	0	0	0	0	0	0	0	0	0	0	1	1
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	1	0	0	0	1	1	0	0	0	0	3
		0	1	0	0	0	1	1	0	0	0	1	4
Ohio	N	2	1	1	0	0	0	1	0	0	0	1	6
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	3	2	3	0	1	3	0	0	12
		2	1	1	3	2	3	1	1	3	0	1	18
Oklahoma	N	1	0	1	0	0	0	0	2	1	1	1	7
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	1	0	1	1	1	1	1	0	4	0	10
		1	1	1	1	1	1	1	3	1	5	1	17
Oregon	N	0	0	0	0	0	0	1	0	0	0	0	1
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	0	5	3	4	2	0	1	0	0	1	17
		1	0	5	3	4	2	1	1	0	0	1	18
Pennsylvania	N	0	0	0	1	0	0	0	0	0	0	0	1
	SM	0	0	0	0	0	0	0	1	0	0	0	1
	IN	0	0	0	0	0	1	0	0	0	0	2	3
		0	0	0	1	0	1	0	1	0	0	2	5
Rhode Island	N	0	0	0	0	0	0	0	0	0	0	0	0
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
South Carolina	N	0	0	1	0	0	0	0	0	1	2	0	4
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	1	1	2	1	1	2	1	1	1	1	13
		1	1	2	2	1	1	2	1	2	3	1	17
South Dakota	N	0	0	0	1	0	0	0	0	0	1	0	2
	SM	0	0	0	0	0	0	1	0	0	1	0	2
	IN	0	1	2	0	1	0	0	1	0	1	0	6
		0	1	2	1	1	0	1	1	0	3	0	10
Tennessee	N	0	0	2	0	1	1	0	0	0	0	0	4
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	1	0	1	0	0	0	1	1	0	0	5
		1	1	2	1	1	1	0	1	1	0	0	9
Texas	N	1	2	5	6	5	4	7	8	5	14	12	69
	SM	0	1	0	0	0	0	0	0	0	0	0	1
	IN	3	5	7	12	7	10	12	14	7	10	6	93
		4	8	12	18	12	14	19	22	12	24	18	163

Table 6.—Insured banks chartered, by type of bank and state, annually 1953-62 and January 1-June 28, 1963—Continued

State		1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1/1-6/28 1963	Total
Utah	N	0	0	0	0	0	0	0	0	0	1	1	2
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	0	0	1	1	0	1	0	0	0	1	5
		1	0	0	1	1	0	1	0	0	1	2	7
Vermont	N	0	0	0	0	0	0	0	0	0	0	0	0
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
Virginia	N	0	0	0	1	1	0	0	1	0	2	1	6
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	1	1	0	3	0	0	1	2	1	1	11
		1	1	1	1	4	0	0	2	2	3	2	17
Washington	N	0	0	1	1	0	0	2	1	0	1	0	6
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	2	5	1	0	3	0	2	4	3	1	22
		1	2	6	2	0	3	2	3	4	4	1	28
West Virginia	N	0	0	0	0	1	0	0	0	0	0	0	1
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	2	0	1	0	0	1	0	0	2	0	6
		0	2	0	1	1	0	1	0	0	2	0	7
Wisconsin	N	0	0	0	0	0	1	1	1	2	0	2	7
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	0	0	0	1	1	2	3	3	5	2	18
		1	0	0	0	1	2	3	4	5	5	4	25
Wyoming	N	1	0	0	0	0	0	0	1	0	1	1	4
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	0	0	0	1	0	0	1	1	0	0	0	3
		1	0	0	1	0	0	1	2	0	1	1	7
Virgin Islands	N	0	0	0	0	0	0	0	0	0	0	0	0
	SM	0	0	0	0	0	0	0	0	0	0	0	0
	IN	1	0	0	0	0	0	0	0	0	0	0	1
		1	0	0	0	0	0	0	0	0	0	0	1
Total	N	16	16	28	30	20	18	24	34	26	65	65	342
	SM	10	6	4	6	3	2	4	5	2	4	3	49
	IN	37	42	71	72	50	63	75	75	71	100	57	713
		63	64	103	108	73	83	103	114	99	169	125	1,104

Table 7.—DE NOVO branch applications of national banks, by States, January 1-June 28, 1963: received, approved, rejected, abandoned, and pending as of June 28, 1963

State	Received	Approved	Rejected	Abandoned	Pending 6-28-63
United States	565	367	45	45	108
Alabama	5	5	0	0	0
Alaska	14	8	2	3	1
Arizona	16	12	3	0	1
Arkansas	7	7	0	0	0
California	82	45	7	14	16
Colorado	0	0	0	0	0
Connecticut	18	13	2	1	2
Delaware	1	1	0	0	0
District of Columbia	5	4	1	0	0
Florida	0	0	0	0	0
Georgia	8	6	0	1	1
Hawaii	1	1	0	0	0
Idaho	7	5	2	0	0
Illinois	0	0	0	0	0
Indiana	12	5	1	0	6
Iowa	5	4	0	1	0
Kansas	1	1	0	0	0
Kentucky	5	2	0	1	2
Louisiana	13	10	0	1	2
Maine	4	3	0	1	0
Maryland	19	11	2	1	5
Massachusetts	12	11	0	1	0
Michigan	30	19	5	2	4
Minnesota	0	0	0	0	0
Mississippi	3	2	0	0	1
Missouri	3	2	0	1	0
Montana	0	0	0	0	0
Nebraska	1	1	0	0	0
Nevada	3	1	0	2	0
New Hampshire	5	0	0	0	5
New Jersey	31	19	3	1	8
New Mexico	3	2	0	0	1
New York	67	45	4	3	15
North Carolina	14	14	0	0	0
North Dakota	7	3	1	2	1
Ohio	18	10	0	4	4
Oklahoma	1	0	0	0	1
Oregon	4	3	1	0	0
Pennsylvania	61	40	9	2	10
Rhode Island	0	0	0	0	0
South Carolina	9	6	0	0	3
South Dakota	0	0	0	0	0
Tennessee	20	10	0	0	10
Texas	0	0	0	0	0
Utah	3	10	1	0	2
Vermont	1	1	0	0	0
Virginia	21	14	1	2	4
Washington	25	21	0	1	3
West Virginia	0	0	0	0	0
Wisconsin	0	0	0	0	0
Wyoming	0	0	0	0	0

Table 8.—Branches of national banks: opened for business, discontinued or consolidated, January 1-June 28, 1963, and branches in operation December 31, 1962 and June 28, 1963

State	Branches in Operation 12-31-62	Branches Opened for business, 1-1—6-28-63	Existing branches discontinued or consolidated 1-1—6-28-63	Branches in Operation 6-28-63
United States	6,447	371	42	6,776
Alabama	82	4	0	86
Alaska	29	2	6	25
Arizona	144	4	1	147
Arkansas	27	5	0	32
California	1,437	51	2	1,486
Colorado	0	0	0	0
Connecticut	118	5	1	122
Delaware	2	0	0	2
District of Columbia	66*	3	0	69
Florida	0	0	0	0
Georgia	88	4	0	92
Hawaii	36	2	0	38
Idaho	69	11	0	80
Illinois	0	0	0	0
Indiana	197	9	2	204
Iowa	10	5	1	14
Kansas	21	2	0	23
Kentucky	94	4	0	98
Louisiana	104	5	1	108
Maine	55	3	2	56
Maryland	134	13	1	146
Massachusetts	246	13	1	258
Michigan	268	14	1	281
Minnesota	6**	0	0	6
Mississippi	32	1	0	33
Missouri	11	1	1	11
Montana	0	0	0	0
Nebraska	14***	2	1	15
Nevada	25	2	0	27
New Hampshire	1	0	0	1
New Jersey	307	19	0	326
New Mexico	33	2	1	34
New York	586	63	4	645
North Carolina	173	19	7	185
North Dakota	2	2	0	4
Ohio	377	22	1	398
Oklahoma	21	0	2	19
Oregon	174	5	0	179
Pennsylvania	556	30	3	583
Rhode Island	51	0	0	51
South Carolina	117	8	0	125
South Dakota	34	0	0	34
Tennessee	147	3	1	149
Texas	0	0	0	0
Utah	44	1	1	44
Vermont	19	0	0	19
Virginia	187	23	1	209
Washington	279	9	0	288
West Virginia	0	0	0	0
Wisconsin	22	0	0	22
Wyoming	0	0	0	0
Virgin Islands	2	0	0	2

* Includes 32 branches in operation by 7 nonnational banks in the District of Columbia under the supervision of the Comptroller of the Currency on December 31, 1962 and 34 such branches on June 28, 1963.

** Established prior to enactment of McFadden Act, February 25, 1927.

*** Includes 1 branch established prior to enactment of McFadden Act, February 25, 1927.

Table 9.—DE NOVO branches of insured commercial banks opened for business, by type of bank and state, annually 1953-58

State	1953		1954		1955		1956		1957		1958	
	N	S	N	S	N	S	N	S	N	S	N	S
United States	145	132	172	167	231	209	307	212	278	221	306	233
Alabama	0	0	5	1	6	1	3	2	5	2	3	0
Alaska	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	4	0	1	6	7	2	13	2	7	7	12	0
Arkansas	0	0	0	0	1	1	0	2	1	1	4	2
California	14	12	23	8	44	27	60	25	47	22	62	18
Colorado	0	0	0	0	0	0	0	0	0	0	0	0
Connecticut	0	4	5	4	3	4	6	7	7	7	10	4
Delaware	0	2	0	1	0	1	0	1	0	1	1	1
District of Columbia	2	1	1	1	0	0	0	0	1	1	1	0
Florida	0	0	0	0	0	0	0	0	0	0	0	0
Georgia	2	3	0	0	2	3	4	1	2	1	3	3
Hawaii	0	0	0	0	0	0	0	0	0	0	0	0
Idaho	1	0	0	0	2	0	2	0	1	0	1	2
Illinois	0	0	0	0	0	0	0	0	0	0	0	0
Indiana	6	7	5	5	6	6	11	12	13	9	11	9
Iowa	0	0	0	0	0	4	0	2	0	2	0	0
Kansas	0	0	0	0	0	0	0	0	2	0	5	4
Kentucky	2	1	1	3	9	7	4	6	4	7	1	5
Louisiana	3	5	2	5	8	3	5	9	7	6	9	6
Maine	0	1	3	1	3	0	2	3	4	2	3	3
Maryland	2	1	3	7	2	10	6	3	7	6	2	9
Massachusetts	7	6	7	9	14	15	11	5	8	7	15	8
Michigan	7	16	9	20	10	21	13	13	7	14	16	27
Minnesota	0	0	0	0	0	0	0	0	0	0	0	0
Mississippi	2	2	1	4	2	0	2	3	5	6	2	6
Missouri	0	0	0	0	0	1	0	1	0	0	0	0
Montana	0	0	0	0	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0	0	0	0	0
Nevada	0	0	0	1	1	2	0	0	2	1	0	0
New Hampshire	0	0	0	0	0	0	0	0	0	0	0	0
New Jersey	10	5	14	9	11	9	18	8	13	9	16	9
New Mexico	2	0	1	0	3	0	6	0	1	3	1	3
New York	13	17	15	15	15	18	30	26	27	20	14	21
North Carolina	8	8	11	17	6	12	11	13	12	14	6	15
North Dakota	0	0	0	1	0	1	0	2	0	0	2	0
Ohio	18	6	17	13	13	13	35	22	26	24	27	27
Oklahoma	0	0	0	0	0	0	0	1	0	0	8	1
Oregon	2	1	1	1	3	1	4	1	3	4	4	4
Pennsylvania	17	15	24	18	31	12	32	12	27	19	29	20
Rhode Island	0	2	3	1	4	2	1	2	4	1	3	3
South Carolina	5	2	4	3	2	3	7	1	7	3	10	6
South Dakota	0	1	0	1	0	1	0	0	0	0	0	1
Tennessee	5	6	4	1	5	7	5	7	10	6	11	5
Texas	0	0	0	0	0	0	0	4	0	0	0	0
Utah	0	1	0	1	1	3	1	3	3	5	0	2
Vermont	0	0	0	0	0	0	0	0	0	0	0	0
Virginia	9	6	7	9	10	6	9	9	8	7	8	7
Washington	4	1	5	1	7	4	6	4	6	4	6	1
West Virginia	0	0	0	0	0	0	0	0	0	0	0	0
Wisconsin	0	0	0	0	0	0	0	0	1	0	0	1
Wyoming	0	0	0	0	0	0	0	0	0	0	0	0

N: Branches of national banks.

S: Branches of insured state banks.

NOTE: "The term branch includes any branch bank, branch office, branch agency, additional office, or any branch place of business located in any state of the United States . . . at which deposits are received or checks paid or money lent." 64 Stat. 873, Sec. 3 (o)

* Supervised by Comptroller of the Currency.

Table 9.—DE NOVO branches of insured commercial banks opened for business, by type of bank and state, annually 1959-62, January 1-June 28, 1963, and January 1, 1953-June 28, 1963, inclusive

State	1959		1960		1961		1962		January 1—June 28, 1963		1/1/53—6/28/63		Total
	N	S	N	S	N	S	N	S	N	S	N	S	
United States.	297	283	429	336	431	357	486	380	267	164	3,349	2,694	6,043
Alabama	9	1	8	3	7	2	6	4	3	1	55	17	72
Alaska	2	3	3	1	2	0	5	1	1	0	13	5	18
Arizona	5	3	16	9	11	8	8	5	4	2	88	44	132
Arkansas	4	2	4	1	4	4	5	6	4	1	27	20	47
California	61	23	99	24	84	35	128	46	47	21	669	261	930
Colorado	0	0	1	0	0	0	0	0	0	0	1	0	1
Connecticut	13	6	7	3	10	9	7	4	3	7	71	59	130
Delaware	0	2	0	1	0	1	0	1	0	0	1	12	13
Dist. of Col.	1	2	1	0	1	1	2	1	1	2	11	9*	20
Florida	0	0	0	0	0	0	0	0	0	0	0	0	0
Georgia	5	7	8	8	13	8	8	7	4	4	51	45	96
Hawaii	0	1	3	6	2	3	6	9	2	2	13	21	34
Idaho	0	0	1	1	1	4	1	3	8	1	18	11	29
Illinois	0	0	0	0	0	0	0	0	0	0	0	0	0
Indiana	12	11	14	16	12	16	11	12	8	7	109	110	219
Iowa	4	7	4	8	2	6	0	7	5	2	15	38	53
Kansas	1	3	5	2	4	3	4	2	2	2	23	16	39
Kentucky	11	4	7	7	7	7	7	10	2	1	55	58	113
Louisiana	2	5	7	7	5	8	7	7	6	2	61	63	124
Maine	3	0	3	2	4	3	6	8	0	1	31	24	55
Maryland	5	9	3	12	8	6	13	13	10	2	61	78	139
Massachusetts	9	15	13	10	19	13	18	13	12	3	133	104	237
Michigan	4	31	10	31	16	20	29	21	9	9	130	223	353
Minnesota	0	0	0	0	0	0	0	0	0	0	0	0	0
Mississippi	3	4	3	1	5	7	4	9	1	3	30	54	84
Missouri	1	2	5	10	4	8	2	6	1	0	13	28	41
Montana	0	0	0	0	0	0	0	1	0	0	0	1	1
Nebraska	0	0	8	1	4	1	1	1	2	1	15	4	19
Nevada	1	2	1	1	3	1	2	2	2	1	12	11	23
New Hampshire	0	0	1	0	0	0	0	0	0	0	1	0	1
New Jersey	11	18	20	14	20	12	24	9	16	8	173	110	283
New Mexico	6	0	4	3	4	4	0	5	2	3	30	21	51
New York	27	24	39	36	51	43	43	39	27	16	301	275	576
North Carolina	8	22	17	34	17	18	26	36	9	14	131	203	334
North Dakota	0	0	0	2	0	1	1	1	2	3	5	11	16
Ohio	16	21	14	25	24	25	23	14	14	12	227	202	429
Oklahoma	2	2	4	1	6	4	2	0	0	0	22	9	31
Oregon	9	3	8	5	6	3	7	1	5	4	52	28	80
Pennsylvania	28	23	25	19	31	27	29	10	23	11	296	186	482
Rhode Island	1	1	2	0	0	0	2	6	0	0	20	18	38
South Carolina	3	5	10	3	5	11	9	6	6	1	68	44	112
South Dakota	0	0	5	1	0	3	0	3	0	2	5	13	18
Tennessee	11	2	11	9	12	6	9	9	3	1	86	59	145
Texas	0	5	0	0	0	4	0	12	0	0	0	25	25
Utah	0	1	3	2	1	2	1	5	2	2	12	27	39
Vermont	1	2	1	0	0	1	0	1	0	0	2	4	6
Virginia	8	10	13	9	14	17	16	18	14	9	116	107	223
Washington	10	1	15	5	11	2	12	5	7	2	89	30	119
West Virginia	0	0	0	0	0	0	0	0	0	0	0	0	0
Wisconsin	0	0	3	3	1	0	2	1	0	1	7	6	13
Wyoming	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 10.—Branches of national banks authorized, January 1-June 28, 1963,[1] by community population and size of bank

In unincorporated areas	16
In cities with population less than 5,000	100
In cities with population from 5,000 to 25,000	110
In cities with population from 25,000 to 50,000	27
In cities with population over 50,000	110
TOTAL	363
By banks with less than $10 million total resources	53
By banks with total resources of $10 million to $25 million	60
By banks with total resources over $25 million	250
TOTAL	363

[1] For 1962 data see **Annual Report of the Comptroller of the Currency**, 1962.

Table 11.—Mergers, January 1, 1963-June 28, 1963[1]

Applications pending as of January 1, 1963	16
Applications received, January 1-June 28, 1963	48
Disposition of applications: January 1-June 28, 1963:	
Approved	35
Disapproved	1
Withdrawn	1
Pending: June 28, 1963	27
Transactions Completed—Total[2]	39
Merger[2]	28
Consolidation	5
Purchase and sale transaction	6

The aggregate totals of capital stock and capital accounts for the certificates issued are as follows:

	Charter or purchasing bank	Merg., Consol. or selling bank	Combined
Capital stock	$ 366,157,830	$22,444,770	$ 380,232,200
Capital accounts	1,144,201,176	70,568,076	1,211,203,205

[1] Includes mergers, consolidations, and purchase and sale transactions, involving national banks.
[2] Includes 4 certificates issued that were approved in 1962.

Current Legal and Regulatory Developments

In this section, which will appear regularly in the REVIEW, *developments of law and regulation in the field of money and banking will be presented in narrative form for each quarter. For this first issue of the* REVIEW, *the discussion traces developments in the Office of the Comptroller of the Currency, from the beginning of Mr. Saxon's administration through the first half of 1963. In subsequent issues, this summary of the Comptroller's activities will be carried forward currently so as to provide a continuing historical record, and the discussion will be extended to cover other pertinent developments in the field of money and banking.*

I. *Lending Limits*

A National Bank is not permitted to lend to any one customer an amount in excess of 10% of its capital and surplus, although this limitation is subject to certain stated exceptions. These provisions of law have been re-examined, and new interpretations conforming with modern-day practices have been provided.

Several new rulings have been placed into effect, redefining an "obligation" within the meaning of the lending limits statute (12 U.S.C. 84). These rulings have modified what must be considered an "obligation" of the borrower in determining the lending limit to that borrower.

The obligation of a seller of third party paper who has agreed to repurchase it upon default is subject to the lending limit, but the new rule is that the amount of the seller's obligation (unless otherwise limited) is measured by the unpaid balance of such paper owned by the bank, less any applicable seller's reserves for defaulted paper. A related rule recognizes that the seller incurs no obligation subject to the lending limit when he permits an agreed portion of the purchase price of third party paper to be retained by the bank as collateral security against uncollectibility of the paper.

The principle that the liability of an endorser or guarantor is an "obligation" for the purpose of determining a bank's lending limit, only where the party has himself obtained a loan or has sold or discounted the paper, has been extended to all accommodation parties. In other words, where a party has lent his name and credit to the transaction, but has at no time shared in the proceeds of the loan, his obligation need not be considered when the bank determines whether it has loaned its legal limit to him.

Similarly, the Comptroller has ruled that where the obligation of the customer to repay a loan is limited to the proceeds of the property transferred as security, and the customer's obligation with respect to the collateral is limited to a warranty of validity as of the date of its transfer, the described obligations do not represent "obligations" subject to the lending limit, and the collateral does not represent an obligation of the customer. However, banks have been cautioned that they should exercise prudent banking judgment in order to avoid undue concentration of underlying collateral in a limited area of economic activity.

In recognition of custom and practice within the banking industry, a purchase of Federal Reserve funds is now regarded as a purchase and sale of funds. Accordingly, these transactions are no longer viewed as resulting in obligations subject to the lending limit (of 12 U.S.C. 84), or obligations subject to the limitations placed on borrowing by a National Bank (12 U.S.C. 82).

The requirement (of 12 U.S.C. 84) that loans to certain borrowers must, in certain instances, be combined in determining lending limits to such borrowers has long been a source of controversy and misunderstanding, particularly in the case of corporate and partnership borrowers. In the case of loans to affiliated corporations, it has been ruled that separate loans to separate corporations are generally not to be combined in applying the lending limits to either corporation, except that where a corporation is indebted to the bank its obligations must be combined with the obligations to the bank of all subsidiaries in which it owns or controls a majority interest. In the case of loans to members of a partnership or association, it has been affirmatively stated that individual loans to participants in a partnership or association, for purposes other than the business of the partnership or association, are not required to be combined in determining the lending limit to the partnership.

Certain of the thirteen statutory exceptions to the 10% lending limit have been modified in their interpretation and application to meet the needs of both the business and the banking communities.

Exception 2 paper (12 U.S.C. 84 (2)), which includes obligations arising out of the discount of commercial or business paper which bears the full recourse endorsement of an actual owner, was recently held by the Comptroller to include within its scope negotiable paper given in payment of the purchase price of commodities in export transactions. It was also held that paper which does not bear a full recourse endorsement will qualify under Exception 2 where it is supported by an assignment of appropriate insurance covering the foreign, political and credit risks applicable to the paper. It was also ruled that insurance provided by the Export-Import Bank and the Foreign Credit Insurance Association would be considered appropriate insurance for this purpose. Such an arrangement enables the bank to compete with increased lines of credit in the area of international trade, while retaining substantially the same protection of a full recourse endorsement previously required by Exception 2.

Exception 13, (12 U.S.C. 84 (13)), which is applicable to two-name instalment consumer paper, provides that the obligations of the maker shall be the sole applicable loan limitation where an officer of the bank has certified that the maker's responsibility has been evaluated and that the bank is relying primarily on such maker for payment. In recognition of the modern-day practice of large-scale discounting of instalment consumer paper, the Comptroller has ruled that, where such paper is purchased in substantial quantities, the evaluation and certification as well as the records of the maker's financial condition may be in such form

as is appropriate for the class and quantity of paper involved.

II. *Real Estate Loans*

The statutory provisions (contained in 12 U.S.C. 371) pertaining to the conditions under which a National Bank may make real estate loans have also been re-assessed and new interpretations provided. Earlier regulatory concepts, it was realized, were molded by past custom and past economic conditions, and in part by unnecessary conservatism, rather than by any statutory mandate.

As a result of a study it was concluded that a loan is not a "real estate loan" within the meaning of the statute merely because it is secured by real estate, but only where the bank relies upon real estate as the primary security for the loan. Where the bank, in its judgment, relies principally upon other factors—such as credit standing, earnings record, insurance or guaranties, or take-out commitments—the loan does not constitute a real estate loan within the meaning of the applicable statute, even though as a matter of prudent banking practice the loan may also be secured by real estate. The mistaken notion that any loan supported by real estate security is a real estate loan has frequently resulted in a bank's inability to acquire either a first or second lien on real estate as additional security in an otherwise sound transaction which was never intended to be a real estate loan and which could not conform to the statutory requirements (of 12 U.S.C. 371).

The statute governing real estate loans by National Banks was amended in 1962. The limitation over the volume of real estate loans made or purchased by a National Bank was raised from 60% to 70% of its time and savings deposits, or the unimpaired capital plus the unimpaired surplus oft he bank, whichever is greater. And the limitation on maturities for loans made to finance the construction of residential or farm buildings was increased from nine months or less, to eighteen months or less.

The Comptroller has recently ruled that real estate may be considered "improved" within the meaning of the applicable statute when construction or development has contributed substantialy to its value. Farm land is now deemed "improved" when it is useful for agricultural purposes without further substantial improvements; while business and residential property may be regarded as "improved" when substantial and permanent improvements have been constructed and developed on the property, or when its value has been enhanced by such improvements in its immediate vicinity. Whether on-site or off-site improvements have enhanced the value of property, so as to make it "improved" real estate, is now a question of prudent banking judgment to be resolved in light of the facts of each particular case.

Amortization of real estate loans has long been thought to require a payment of principal on a mechanically regular-and-equal basis throughout the life of the loan. Such a view has been a source of much difficulty to both the bank and its customer, especially in the case of business situations where returns are received on a different basis. Amortization is now defined as a reduction of the debt principal during the life of the loan. Although it is contemplated that amortization will ordinarily be on a regular schedule of payments, deviations from such a schedule, when based on prudent banking judgment, are permitted. This ruling will allow banks to take account of situations in which there are low profits at the outset, initial heavy capital investments, and periods of costly research and development.

Participations in real estate loans continue to present many problems. National Banks have been allowed to participate at the outset with others in the making of a real estate loan, or to purchase an out-

standing real estate loan in its entirety. Purchase of portions of a real estate loan has also been permitted when the bank thereby becomes the owner of the entire loan. The Comptroller has concluded that it is also a prudent and often necessary banking practice to purchase or sell participations in existing real estate loans, even when the purchasing bank does not thereby become the owner of the entire loan. In such cases the participation has only some of the characteristics of a real estate loan. Such transactions have recently been ruled to be within the power of a National Bank where the interests of the participating banks are adequately protected by the terms of the participation agreement.

Under a recent ruling of the Comptroller, where state law permits or recognizes condominium ownership, the purchaser of a condominium apartment takes title to real estate eligible as security for a real estate loan by a National Bank. In condominium ownership the owner-mortgagor owns separately one or more single dwelling units in a multiple apartment, and has an undivided interest with the owners of the other apartments in common areas and facilities serving the building.

III. *Bank Premises*

National Banks are, by statute, limited in their ownership of real estate to certain stated purposes, one of which is real estate such as is necessary for the accommodation of the bank in the transaction of its business. This concept has recently been expanded so as to permit ownership of real estate to be used for parking facilities and data processing centers, and also to cover real estate which the bank needs to acquire for expected future use. A bank is thus free to acquire land in anticipation of its needs and at favorable times for purchase.

In order for a National Bank to invest in its bank premises an amount in excess of its capital stock, it has had to obtain the prior consent of the Comptroller of the Currency (12 U.S.C. 371d). However, under a recent ruling of the Comptroller, no such approval is required for investments made by an affiliated corporation holding the premises of the bank, if the bank itself has made no investment in the affiliated corporation in any of the ways described in the statute. Moreover, the Comptroller has announced that he will ordinarily approve investments in bank premises up to 50% of the bank's capital, surplus, and undivided profits, where reasonable need can be shown.

IV. *Lease Financing*

Lease financing has gained prominence as a means of credit extension by National Banks. Equipment leases have long been considered to be evidences of debt for purchase by National Banks within the meaning of Paragraph Seventh of 12 U.S.C. 24. Such leases also have been ruled to be instalment consumer paper to which Exception 13 of 12 U.S.C. 84 is applicable. Under this exception, where the bank has a full recourse endorsement by the lessor making the lease assignment, but is relying primarily upon the lessee for the payment of the lease rental obligations, the obligations of the lessee are the only applicable loan limitation.

The development of lease financing companies has established that there is a significant need for a form of leasing in which property management is largely in the hands of the lessee. Following a study by the Comptroller of the Currency, which was stimulated in part by the recommendations of the Advisory Committee on Banking, it was concluded that this form of leasing is a financial undertaking well within the power of a National Bank. It has been ruled that the leasing by a National Bank of personal property, acquired upon the specific request of and for the use of its customer, and the incurring of such additional

obligations as may be incident to becoming an owner of personal property and the lessor thereof, is a lawful exercise of the powers of a National Bank and necessary to the business of banking. A further ruling of the Comptroller points out that although the sum of lease rentals due from one lessee might exceed the bank's lending limit, this fact is without bearing since such remittances are payments for the use of property owned by the bank and not repayments on a loan. However, banks have been cautioned that they should avoid any undue concentration in such investments.

The power which National Banks possess to engage in direct lease financing transactions does not carry with it the power to purchase merchandise for the purpose of stocking in anticipation of future leasing. While a National Bank may become the owner of commodities, it may not carry out the functions of the merchant. A National Bank may not purchase commodities for stock, and hold them for eventual anticipated lease or sale. It may purchase only at the request of a customer who wishes to have the full and immediate use of the commodity on a lease basis. National Banks thus may become the owner of commodities in permitted lease financing transactions principally for the purpose of providing a well defined financial, and not a merchandising, service. They may not offer or solicit the sale of commodities—but only of financing.

V. *Purchase of Open Accounts*

Although banks have for some time purchased open accounts, there has been concern that such accounts may not always represent evidences of indebtedness, and that such purchases might, therefore, be beyond the power of a National Bank. A ruling of the Comptroller recognizes that such purchases are a well-known form of financing which is within the power of a National Bank.

VI. *Miscellaneous Powers*

In the past, a National Bank has been permitted to act as an insurance agent only in a community the population of which did not exceed 5,000 inhabitants, and only when its home office was in such a community. The Comptroller recently has ruled that a National Bank may act as an insurance agent at any office of the bank located in a community having a population of less than 5,000, irrespective of the size of the community in which its home office is located. He has also ruled that National Banks in any location may act as agent for the issuance of insurance which is incident to banking transactions; and that they may retain the commissions received therefrom or impose and retain service charges therefor. National Banks are now permitted to advertise, develop, and extend travel services for the purpose of attacting customers to the bank. A National Bank, as a necessary business expense, may now make reasonable contributions to agencies and groups to further the fiscal, economic, and social development of its community.

VII. *Service Charges*

Formal instructions concerning service charges were issued by the Comptroller of the Currency during the past year. Although it was recognized that identical charges for identical services may occur even in the absence of any agreement, arrangement, undertaking or understanding among banks, through clearing houses or otherwise, National Banks were cautioned that each must be prepared to demonstrate conclusively to the Comptroller that its scale of service charges was adopted unilaterally, and not on the basis of any agreement or understanding, or even discussion, among banks or their officers. Each bank was directed to review and re-establish its scale of service charges independent of any relationship with any other bank—such revised scale

to be made in accordance with what is deemed necessary or desirable in the light of the individual bank's costs and competitive position.

VIII. *Corporate Practices and Procedures*

The Comptroller of the Currency, in December 1962, issued regulations dealing with certain of the corporate practices and procedures of National Banks. These regulations have as their purpose the imposition of disclosure requirements designed to safeguard the interests of those affected by the management and operation of National Banks, in a format consistent with bank regulation and the public interest.

Every National Bank having deposits of $25,000,000 or more at the close of the preceding calendar year is now required to furnish to each of its stockholders, not later than 60 days after the close of such calendar year, a written annual report. These reports must contain, as a minimum, a comparative balance sheet, a comparative statement disclosing net operating income, and a comparative reconciliation of capital accounts.

In order to assist National Banks in their efforts to obtain and retain qualified personnel, a regulation was issued permitting, with certain limitations, employee stock option and stock purchase plans. The regulation authorizes the adoption of employee stock option plans conforming to the requirements of the Internal Revenue Code, and such other employee stock purchase plans as may be appropriate.

A regulation was issued relating to capital adequacy, authorized but unissued stock, stock dividends, and other changes in capital structure. It was stated that the policy of the Comptroller is not to discourage the retention of earnings by National Banks through the issuance of stock dividends—and, therefore, stock dividends, whether on a recurring or non-recurring basis, will not be subject to disapproval, except in rare or unusual circumstances. Departing from tradition, a policy was announced permitting the issuance of preferred stock or capital debentures in accordance with normal business practice, rather than solely in response to emergency considerations.

A regulation was also imposed on National Banks requiring a report be filed with the Comptroller's office wherever a substantial change occurs in stock ownership.

In an effort to correct deficiences in the information provided to stockholders by some banks, a detailed regulation governing information required in proxy statements accompanying proxy solicitations was issued. The new regulations are applicable to proxy solicitations involving National Banks having total deposits of $25,000,000 or more as of the end of the calendar year preceding such solicitation. The required information pertains to nominees for directorship; remuneration and other benefits payable to principal bank officers; bonus, profit-sharing, retirement, and other remuneration plans; stock options, warrants and rights; issuance of securities; and amendments to the articles of association.

IX. *Investment Regulations*

National Banks are permitted to purchase investment securities for their own account, under such limitations and restrictions as the Comptroller of the Currency may by regulation prescribe (12 U.S.C. 24). A proposed revision of the present Investment Securities Regulation has recently been published and is under consideration. Pursuant to 12 U.S.C. 335, the proposed regulation would also be applicable to State banks which are members of the Federal Reserve System. In general, this proposed revision restates the statutory requirements in a simplified form, and provides standards for their application to particular securities.

The proposed regulation defines investment securities, and some of the terms used in the law with respect to public securities. The term "political subdivision," for example, is defined to include public authorities and the publicly-owned instrumentalities of state and local governments. The phrase "general obligation," which is defined as an obligation supported by the full faith and credit of "any State or of any political subdivision thereof," includes "an obligation payable from a special fund when the full faith and credit of a State or any political subdivision thereof is obligated for payments into the fund of amounts which will be sufficient to provide for all required payments in connection with the obligation." These and other definitions relating to public securities represent a statement of the principles which were applied in recent rulings of the Comptroller (made pursuant to 12 U.S.C. 24) on securities issued by the Georgia State Authorities, the Public Building Commission of Chicago, the Virginia Public School Authority, and the General State Authority of the Commonwealth of Pennsylvania.

Included in this proposed regulation is the requirement that the bank must use prudent banking judgment in exercising its authority to deal in, underwrite, purchase, hold without limit, and sell a public security. A special provision is proposed to allow a bank with a qualified investment department a somewhat broader range of discretion with respect to a limited portion of its investment portfolio. Provisions are also included relating to (a) requests for rulings by the Comptroller, (b) purchase of convertible securities and (c) amortization of premiums.

X. *Trust Regulations*

There have been several significant developments relating to the operation of trust departments by National Banks. On September 28, 1962, a law (12 U.S.C. 92a) was enacted which transferred from the Board of Governors of the Federal Reserve System to the Comptroller of the Currency the responsibility for the granting and supervision of trust powers exercised by National Banks. Immediately upon the enactment of this law, the Comptroller placed into effect Regulation 9 which, in substance, was the same as the Board's Regulation F. Thereafter, the Comptroller of the Currency, with the technical assistance of an Advisory Committee appointed by him, undertook a study which led to a revision of Regulation 9. A proposed revision was published in the Federal Register on February 5, 1963 (28 F. R. 1111), and the final revision became effective on April 5, 1963 (12 C.F.R. 9). The revisions in this regulation as finally prescribed are divisible into 3 categories: (1) collective investment; (2) conflicts of interest; and (3) management supervision.

In the field of *collective investment*, the new regulation permits the investment in a common trust of the funds of "managing agency accounts." "Managing agent" is defined, making specific the elements necessary to establish a "managing agency account," within the meaning of the regulation. Only those agency agreements which confer on the bank, in fact or in effect, a power of attorney and investment discretion qualify under the definition. Therefore, it is only the monies of agency accounts where the bank has assumed fiduciary duties identical to those of formally designated trustees, executors, and administrators of guardians which may be collectively invested. Heretofore banks have had to invest such funds separately. The regulation expressly provides that "no bank administering a collective investment fund shall issue any certificate or other document evidencing a direct or indirect interest in such fund in any form." The managing agency account, as permitted, will not constitute an agreement in any form to invest in a

common trust fund. The decision to invest funds of a managing agency account in a common trust fund, or in any other investment program, is made by the bank.

The second major change which has been effected with respect to collective investment, is the elimination of the "bona fide fiduciary purpose" language. This language was abandoned because it lacked any definable meaning and was misunderstood by many.

Although the regulation does not abandon the specific advertising prohibitions contained in the old regulation, they are slightly modified. A bank now is required to publish a summarized annual report of its common trust funds, in a form prescribed by the Comptroller of the Currency. In addition, a bank is permitted to publish as a part of the advertisement of its trust department services, the fact that a copy of this financial report is available upon request. A bank, seeking to evade this provision by publishing an advertisement which made other than incidental mention of its common trust fund in the course of advertising the range of the bank's fiduciary services, would violate this regulation. Banks are now also required to furnish a copy of the Plan and the financial report for its common trust fund(s), upon request, to all persons. Other than these specifically permitted or required activities, nothing which could be characterized as advertising of any kind is allowed. These provisions are designed to impose disclosure requirements for the protection of persons interested in common trust funds, in a format consistent with bank regulation and the public interest.

Other changes pertaining to collective investment are (1) the elimination of separate mortgage investment funds (there is a grandfather clause, authorizing for a reasonable time the continuation of mortgage investment funds established and existing under prior regulations); (2) a clarification of the fact that monies of qualified pension and profit sharing trusts may be invested in common trust funds; and (3) an indication that the Comptroller of the Currency will examine all investments held by a National Bank as fiduciary, including those held in a collective investment fund, and that the scope of such examination appears in much greater detail in the *Manual of Instructions for Representatives in Trusts,* which is now available to banks.

A number of other significant amendments have also been put into effect. Among these are (1) the elimination of the $100,000 limit on a single participation in a common trust fund (the limitation that not more than 10% of a fund may be acquired by one participant has been retained, as well as the limitation that no more than 10% of the fund may be invested in the securities of one issuer); (2) the segregation of defaulted mortgages is made optional (alternatives available are the setting up of a reserve to which defaulted interest may be charged, or the outright purchase by a bank of defaulted mortgages, in certain cases); (3) the adoption of the entity theory, solely for purposes of determining whether a particular investment in a collective investment fund is proper; (4) the elimination of the seven-day requirement for completing the valuation of assets; and (5) permission to charge a reasonable fee for the management of a collective investment fund, provided that the proportionate share of such fee paid by each participating account shall not exceed that which would have been charged had the funds not been invested in the fund.

In regard to *conflicts of interest,* amendments have been provided in the regulation to make it clear that among the transactions which must be lawfully authorized by the instrument governing the transaction, or by local law, are transactions in stock or obligations of the fiduciary bank, its affiliates and their direc-

tors, officers or employees. Clarifications have been made pertaining to dealings between accounts, consistent with the requirements of local law. An amendment has also been provided to make it clear that a bank may, under proper limitations, loan money to an account upon the security of the account's assets.

These changes are designed to impose standards in this area which accord with local law. Thus, those conflict-of-interest situations which are effectively authorized under local law are permitted, and it is not necessary that the instrument governing the relationship "expressly require" such actions. The amount of FDIC coverage may now be taken into account in determining the amount of pledged securities necessary to be set aside for trust funds on deposit in a bank's commercial department. Consistent with a recognition that managing agency accounts, as defined, are in fact trusts, a pledge for such monies so deposited is required.

In the area of *management supervision*, the revised regulation emphasizes the responsibility of the board of directors for the proper supervision of the fiduciary activities of the bank. Changes have been made, more clearly to require that the board may not delegate these duties, but may assign their performance to directors, officers, employees, or committees, as it may choose. If such duties are so assigned, however, this must be done clearly and specifically, as a matter of record.

The regulation does not divide fiduciary powers into categories. Henceforth, a bank granted fiduciary powers may exercise only such powers as are consistent with the soundness of the institution. Many banks, at present, have a limited grant of trust powers under permits issued by the Board of Governors of the Federal Reserve System or the Comptroller of the Currency. On the belief that no bank is only partly competent to exercise fiduciary powers, the Comptroller henceforth deems such National Banks to be possessed of all fiduciary powers which are not in contravention of the law of the state in which it is located.

XI. *Merger Litigation*

Two proposed mergers involving National Banks which had been approved by the Comptroller of the Currency pursuant to the provisions of the Bank Merger Act of 1960 (12 U.S.C. 1828(c)), have been challenged in the courts as possible violations of Section 1 of the Sherman Act (15 U.S.C. 1) and Section 7 of the Clayton Act (15 U.S.C. 18).

In one case, involving a proposed merger of two Philadelphia Banks, the District Court entered a judgment dismissing the complaint, and concluded that the proposed merger was not within the scope of Section 7 of the Clayton Act. The Court held further that even if the proposed merger were within the scope of Section 7, it would not constitute a violation of that section. *United States* v. *Philadelphia National Bank*, 201 F. Supp. 348 (E.D. Pa. 1962). The United States appealed to the United States Supreme Court under Section 2 of the Expediting Act, 15 U.S.C. 29. That court reversed the judgment of the District Court, and held that the proposed merger was forbidden by Section 1 of the Clayton Act and must therefore be enjoined. *U.S.* v. *Philadelphia Nat. Bank*, 374 U.S.—(1963). The court stated that it need not reach the further question of an alleged violation of Section 1 of the Sherman Act.

Next term the Supreme Court will consider a bank merger in relation to the Sherman Act. At that time it will hear *U.S.* v. *First National Bank & Trust Co. of Lexington*, No. 36 O. T. 1963, which is an appeal by the United States from the District Court's judgment dismissing the complaint after finding that the merger, previously approved by the Comptroller of the Currency, did not constitute a

violation of Sections 1 or 2 of the Sherman Act. *United States* v. *First Nat. Bank & Trust Co. of Lexington*, 209 F. Supp. 457 (E. D. Ky. 1962).

The Supreme Court, in the *Philadelphia* case, as did the DistrictCourts in both the *Philadelphia* and *Lexington* cases, held that the Bank Merger Act of 1960 did not remove bank mergers from the application of either the Sherman or Clayton Acts, and that the approval of a bank merger by the Comptroller of the Currency under the Bank Merger Act of 1960 is not a final and conclusive determination of its legality.

Other pending cases involving the applicability of the antitrust laws to bank mergers include *United States* v. *Continental Illinois National Bank and Trust Company of Chicago et al.*, Civil Action No. 61 C 1441 (D.C.N.D. Ill.), and *United States* v. *Manufacturers Hanover Trust Company*, Civil Action No. 61 C 3194 (D.C.S.D.N.Y.). Another pending case involving alleged violations of the Sherman and Clayton Acts is *United States* v. *The Valley National Bank of Arizona et al.*, Civil Action No. 4550-PHX. (D.C.D. Ariz.).

XII. *Other Litigation*

In a case in which it was unsuccessfully contended that the Comptroller should be required to revoke a new branch certificate, the United States Court of Appeals for the Sixth Circuit agreed with the District Court that the scope of judicial review of the Comptroller's actions is whether the action taken by the Comptroller was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. *Community National Bank of Pontiac* v. *Saxon*, 310 F. 2nd 224 (6 Cir. 1962).

In a derivative action by stockholders of a National Bank, the court held that the Comptroller had an exclusive and unreviewable power of discretion in determining whether or not to appoint a conservator, to terminate a conservatorship, or to approve or disapprove a sale of the assets of a National Bank. The court, which dismissed the action against the Comptroller, stated that the Comptroller's "jurisdiction in respect to all matters properly within his discretion is exclusive, and he is in respect thereto in no manner amenable to any court nor is his action subject to review therein." *Minichello* v. *Saxon*, 207 F. Supp. 299 (M.D. Pa. 1962). An appeal is pending in this case.

Another case involved a Comptroller's decision approving the formation of a new National Bank which was to be an affiliate by common stock ownership with a neighboring bank. The existing bank was prohibited by state law from establishing a branch at the location where the new affiliate bank was established. Both the United States District Court and the United States Court of Appeals held that the establishment of a new bank at a location prohibited as a branch location for the new bank's affiliate was not a violation of the spirit or the letter of the state law applicable to branch banking. *Camden Trust Co.* v. *Gidney*, 301 F. 2d 521 (D.C. Cir. 1962), cert. den. 369 U.S. 886 (1962).

In two other cases involving essentially the same legal question as in *Camden*, the Comptroller's position was upheld and the principle announced in *Camden* was applied to states in which no branching is permitted. *State of Colorado, ex rel. Weld County Bank et al.* v. *Saxon*, Civil Action No. 2167-61 (D.C.D.C. 1962), and *State of Colorado, ex rel. Center State Bank et al.* v. *Saxon*, Civil Action No. 1587-61 (D.C.D.C. 1962). These decisions are also in accord with a case in which it was unsuccessfully argued that ownership of affiliate banks within a state by a bank holding company constituted a violation of a state prohibition against branching and the Bank Holding Com-

pany Act of 1956, 12 U.S.C. 1841-1848. *First National Bank in Billings* v. *First Bank Stock Corp.*, 306 F. 2d 937 (9 Cir. 1962).

In a recently decided case, it was held that the chartering and establishment of a new National Bank owned by a bank holding company would, in the circumstances of the particular case, be in violation of the applicable branching laws. The Court of Appeals did not pass on the District Court's decision (*Bank of New Orleans and Trust Company* v. *Saxon*, 211 F. Supp. 576 (D.D.C. 1962)) that such chartering and establishment of a new National Bank would be in violation of Section 7 of the Bank Holding Company Act of 1956, 12 U.S.C. 1846. *Whitney National Bank* v. *Bank of New Orleans and Trust Company et al.*, No. 17, 672 (D.C. Cir. 1963) and *James J. Saxon* v. *Bank of New Orleans and Trust Company et al.*, No. 17, 681 (D.C. Cir. 1963).

In a recently decided case, a state sought permanently to enjoin a National Bank from operating as branches, three state banks which it had acquired through merger. It was contended that the merger was illegal, and that the operation of the three state banks as branches of the National Bank was in violation of certain rules and regulations of the state banking commission concerning branch location. It was also alleged that this merger by the defendant National Bank, the stock of which was owned by a bank holding company, was in violation of the Bank Holding Company Act of 1956, 12 U.S.C. 1841-1848. Although the court was of the opinion that the state had no standing to challenge the validity of the establishment and operation of the three bank branches by the defendant National Bank, or to maintain an action to enforce the provisions of the Bank Holding Company Act of 1956, the court discussed the other contentions of the parties. The court stated that the rules and regulations of the state banking commission concerning branch locations were not determinative as to branch locations of National Banks, and were themselves invalid because they were in conflict with the statutory plan for branch banking in the state. The court further stated that the acquisition was lawful, inasmuch as the transaction fell within the exception contained in section 1842(a)(3) of the Bank Holding Company Act of 1956, which provides that approval by the Board of Governors of the Federal Reserve System is not required when the subsidiary bank of a holding company acquires the assets of another bank. *State of South Dakota* v. *The National Bank of South Dakota et al.*, Civil No. 1353 (D.C.D.S.D. 1963).

The Comptroller's issuance of a branch certificate was contested in a case where the new branch was located in an unincorporated area adjacent to an incorporated village in which competitor banks enjoyed home office protection. It was contended that the area was prohibited as a branch location for the defendant bank because, although the area could qualify for incorporation as a village under state law, it lacked the required physical characteristics of a village in the community sense. It was also contended that the issuance of the branch certificate was illegal because the Comptroller violated his own rules and regulations in processing the branch application. Granting the Comptroller's motion for summary judgment, the court held that the Comptroller had complied with the branch location requirements of 12 U.S.C. 36, that *ex parte* contacts such as were made with the Comptroller were not prohibited, and that the opening by the defendant bank in temporary quarters did not constitute a new branch application such as might have required investigations by lower echelons in the Office of the Comptroller. *The Union Savings Bank of Patchogue et al.* v. *James J. Sax-*

on, Comptroller of the Currency et al., Civil Action No. 245-62 (D.C.D.C.).

In two pending actions, the plaintiffs are seeking to enjoin the operation by a National Bank of a branch in a particular municipality, on the ground that state law does not permit the establishment of a branch in a municipality in which an existing bank has its principal office or a branch office. It is contended that the plaintiff state bank is the only bank which has legal authority to operate a branch in the municipality, inasmuch as it had received a certificate of authority to establish a branch in the municipality prior to the time that the National Bank either received a branch certificate or commenced its branch operation. *Suburban Trust Company* v. *National Bank of Westfield*, 211 F. Supp. 694 (D. N.J. 1962).

Two cases were recently instituted in which it is alleged that the Comptroller's authorization of a branch in the same city in which the principal office of the bank is located would be in violation of a state statute which provides, in part, that ". . . no branch bank shall be established in any city or town in which is located a bank or banks, . . . regularly transacting a customary banking business, unless the bank seeking to establish such branch shall take over an existing bank. . . ." In one case, the defendant bank is the only bank with its home office within the same city in which it seeks to establish a branch. Two out-of-town banks, including the plaintiff, each have one branch located in this city. *Walker Bank & Trust Company* v. *James J. Saxon et al.*, Civil Action No. 137-63 (D.C.D. Utah). In the other case, four banks, including the National Bank which seeks to establish a new branch, have their home offices located in the same city where the proposed new branch would be located. The plaintiff bank also has a branch within this home office city. *Commercial Security Bank* v. *James J. Saxon*, Civil Action No. 1815-63 (D.C.D.C.).

In two recently decided cases involving state law which permits the establishment of a branch only in a municipality where an existing bank does not have its principal office or a branch office, it was argued that the operation of a "seasonal agency" in a resort area precluded the establishment of a branch in the same municipality by the defendant National Bank. However, in sustaining the Comptroller's position, the court held that a seasonal agency was not a branch office or a branch bank within the meaning of applicable law, and therefore the Comptroller was legally justified in authorizing the defendant National Bank to establish, maintain and operate a branch office in the same municipality in which the seasonal agency was located. *Charles R. Howell et al.*, v *The National Union Bank of Dover*, Civil Action No. 16-63, (D.C. D.N.J. 1963) and *The Dover Trust Company* v. *The National Union Bank of Dover*, Civil Action 302-63 (D.C.D.N.J. 1963).

Another case involving the definition of a branch was an action for a declaratory judgment that the plaintiff National Bank's proposed drive-in facility was not a separate branch, and therefore not in violation of the restrictions placed on branching by applicable state law. Reversing the Comptroller's determination that the proposed office was a separate branch, the court held that the proposed drive-in office, a "small structure connected by a pneumatic tube and operating as part of the branch now existing . . . only five hundred feet away . . ." was merely an extension of an existing branch. *Michigan National Bank* v. *James J. Saxon*, Civil Action No. 821-62 (D.C.D.C. 1962).

Three pending cases involve the relocation of a banking office to a place where a new or additional branch would be prohibited to the defendant National Bank.

In one such case, it is contended that the Comptroller should be permanently enjoined from authorizing the defendant National Bank to relocate a branch office at another site in the same city. It is contended that the branch relocation constitutes the establishment of a new branch at a prohibited location. *Bank of Dearborn* v. *James J. Saxon et al.*, Civil Action No. 23628, (D.C.E.D. Mich. 1963). In the other two cases, it is alleged that the relocation of the defendant National Bank's principal office to a location where applicable law would prohibit the establishment of a new branch constitutes the establishment of a new branch at a prohibited location. *Traverse City State Bank* v. *The Empire National Bank*, Civil Action No. 4036 (D.C.W.D. Mich.) and *National Bank and Trust Company of Traverse City* v. *The Empire National Bank*, Civil Action No. 4038 (D.C.W.D. Mich.).

Other recently initiated and pending actions involve a bank seeking to enjoin the issuance by the Comptroller of a certificate to the organizers of a new National Bank, *The Trust Company* v. *James J. Saxon et al.*, Civil Action No. 532-63 (D.C.D.N.J.); and a state banking commissioner's attempt to prevent the conversion of a state bank to a National Bank. *Joseph C. McMurray etc.* v. *Security Bank, of Lynwood*, No. 77008 (Superior Ct. Wash.).

In two different cases decided this year the United States Supreme Court upheld the position that actions brought against National Banks outside of the district, county or city in which they were located should be dismissed for lack of venue, because 12 U.S.C. 94 provides that suits against National Banks must be brought in the Federal court of the district in which the National Bank is established, or in any state, county, or municipal court having jurisdiction in similar cases in the county or city in which the National Bank is located. *Mercantile National Bank* v. *C. H. Langdeau*, 374 U.S. —, 83 S. Ct. 520 (1963); *Michigan National Bank* v. *Robertson*, 31 L.W. 3305 (1963).

In another case, an action was brought by a National Bank to recover amounts charged to and collected from it by the state as a use tax, based upon purchases by depositors of specially-printed checks. The court held that the bank, in making such sales to its customers, was a retailer engaged in the business of making sales and, as such, was liable to the state for such use tax, because, as a National Bank, it could be made an agent of the State for the tax without impairing its functions as an instrumentality of the Federal Government. The court further held that the requirement that the bank collect a tax due from its customers was neither a tax on the bank nor a debt prohibited by the provision of the National Banking Act (12 U.S.C. 548) by which Congress strictly limited and defined the means by which states can impose taxes on National Banks. *Bank of America Nat. Trust & S. Ass'n.* v. *State Bd. of Eq.* 26 Cal. Rptr. 348. (Calif. 1963).

In a case involving an investment in banking premises, a plaintiff National Bank unsuccessfully sought to obtain a declaratory judgment setting aside and declaring void the unexpired portion of a 21-year lease covering its banking premises. It was contended that, inasmuch as the bank's aggregate liability for rental payments over the 21-year period was a sum in excess of the amount of its capital stock, the maximum amount permitted for investment in bank premises by 12 U.S.C. 371d, the lease was *ultra vires* and illegal, and therefore not binding on the bank. Although the court concluuded that the plaintiff National Bank had standing to bring this suit, and could not be deemed estopped to challenge the validity of the lease payment, the court held that neither the annual rental payments nor the operating costs could be aggregated

in advance for the 21-year term, and then utilized as a basis for asserting a violation of the statutory limit on investment in bank premises. The court stated that such cumulated rental payments or operating costs in no sense fell within the scope of the restrictions embodied in that statutory limit (12 U.S.C. 371d). With respect to the plaintiff's further contention that, since it used only a few stories of the building and did not need all of the premises covered by the lease, the lease was therefore in violation of the statutory limitations on bank ownership of real estate and *ultra vires*, the court held that it is clear beyond cavil that the statute (12 U.S.C. 29) permits a National Bank to lease or construct a building, in good faith, for banking purposes, even though it intends to occupy only a part thereof and to rent out a large part of the building to others. *Perth Amboy National Bank* v. *Brodsky*, 207 F. Supp. 785 (S.D.N.Y. 1962).

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BOOK REVIEWS

Security Analysis: Principles and Technique. By BENJAMIN GRAHAM, DAVID L. DODD, SIDNEY COTTLE, and CHARLES TATHAM. New York: McGraw-Hill, 1962, pp. viii + 778. $9.95.

This fourth edition of one of the best known and widely used textbooks on security analysis will be welcomed by all students and practitioners of the art of investment. The third revision appeared in 1951. The book has been extensively rewritten; factual and statistical materials have been brought up to date; new developments resulting from changes in the level of stock prices and timely controversies over such problems as optimum capital structures, the proper treatment of revised depreciation charges, the significance of cash flow analysis, and the popular preference for growth stocks are recognized and ably treated by the authors. New illustrations abound in a book that is already noted for the wealth of practical experience that is brought to bear on the solution of the perplexing problems that face the security analyst in his always challenging task.

In its essential form and substance the book follows along the lines of the earlier editions. Some chapters have been deleted, and some new ones added, so that it has substantially the same length as the earlier edition. The imprint of the new principle author, Sidney Cottle, who had an important hand in the revision, is evident, and the results of some of his own research throw added light on significant areas.

Those who know the earlier editions will find themselves on familiar ground in most of the book, for despite the extensive changes, the basic approach to the problem of successful investment remains pretty much the same. The dichotomy between fixed income securities and those having a common stock or speculative nature continues to provide the framework for the book. The emphasis upon common stocks is even stronger than in previous editions, partly because of the added importance of the growth stock approach (about which the authors express considerable reservation), and partly because events since 1951 have caused a good deal of rethinking about the standards of selection that were advocated in the earlier editions.

As true scholars, the authors frequently express the view that present-day stock prices are puzzling to them, and in their search for new yardsticks of value their convictions are less solid than they once were. On the whole they are skeptical about the levels of stock prices that have been reached in recent years, and yet, when confronted with the fact that there seems to be strong support for the new levels, they are inclined to bow to experience and recognize that, since 1950, new criteria of value are operative in the stock market and that a more liberal evaluation of earnings and dividends is in order. One gets the impression that they are not wholly comfortable about this, and are at pains to indicate their disagreement with those who predict an uninterrupted growth in earnings and stock values. They are not sure that presumptive "new" elements such as population growth, government intervention to prevent unemployment, inflationary tendencies, or the new prestige of common stocks has ushered in a new era that makes older standards largely irrelevant. Yet the standards that were suggested in the earlier editions are definitely recognized as too conservative for a number of reasons. Incidentally, this reviewer noted a large number of instances in which the authors seemed to go out of their way to point out in a refreshingly frank way modifications of former positions that they now believe are no longer tenable.

It is impossible within the confines of a brief review to do justice to this comprehensive treatment of security analysis. The book is divided into fifty-three chapters of varying length, grouped under six major headings: Survey and Approach (104 pages); Analysis of Financial Statements (202 pages); Fixed Income Securities (96 pages); The Valuation of Common Stocks (194 pages); Senior Securities with Speculative Features (62 pages); and Other Aspects of Security

Analysis (61 pages). In addition, there is an extensive Appendix, covering thirty pages and containing much useful material.

Three areas of investment practice are emphasized: (1) the analysis of financial statements; (2) the selection of fixed-income securities of the highest investment quality; and (3) the policy of investment in common stocks and related securities. The treatment presupposes a knowledge of financial institutions, and some familiarity with the different kinds of securities and their uses as instruments of corporate financial policy. There is little attempt to explain the basic economics of the capital markets, the nature and possible causes of business cycles, or the possible effectiveness of stabilization policies through fiscal or monetary methods, although these receive some incidental attention. The extensive regulatory environment established under the various federal securities acts are condensed into a fourteen page chapter and part of an Appendix.

Except for four excellent chapters on public utility analysis and stock selection by Charles Tatham, and a single chapter divided between railroad and chemical industry analysis, there is little of the formal "industry approach" to security analysis that is characteristic of most books on investment. And while discussions of specific industry problems are sprinkled throughout the book, anything approaching a systematic analysis of the strategic problems of investment in the securities of particular industries is not undertaken. Rather, the authors have sought to apply more or less uniform methods of analysis to the securities of companies of all industries, recognizing that modifications have to be made for essential differences.

With the exception of public utilities (confined largely to electricity) the book continues to be devoted largely to the analysis of industrial securities. Those who are interested in securities issued by banks, insurance companies, real estate companies, investment trusts, nonelectric utilities, railroads, or governments will find little specialized treatment of these areas, although there are many illustrations of the applications of analytical methods to securities in these fields.

The formal treatment of investment policy, or fitting individual securities to the needs of different types of investors, is quite brief, covering only one early chapter. However, the authors are constantly aware that security analysis must serve the needs of investors who have different requirements, even though their chief focus is on the individual rather than the institutional investor. One gains the impression that they are constantly trying to simplify the area of inquiry and boil investment selection down to either (1) the safest securities, chosen by a process of rejection of anything that does not meet the strictest standards, regardless of yield, or (2) choosing securities that are individually speculative but are bought at prices that are less than "intrinsic values" and which, through diversification, promise generous returns over time.

The authors seem convinced that possible inflation, probable expanding corporate earnings based on a growing economy, and the lessened threat of severe depressions in the future make common stocks more attractive than they previously thought *if they can be bought at reasonable prices.* And their emphasis continues to be on *price* relative to *"intrinsic value"*, based on new standards. They are disturbed that stocks are selling on a dividend yield basis that is below that of highgrade bonds (a condition that has prevailed in only 15 of the past 61 years) after an almost uninterrupted climb that has lasted over thirteen years. Based on historical precedents, storm signals should now be flying. And if the market is too high, it is risky to buy even undervalued stocks, since their prices are likely to decline with the general market. Growth stocks in particular now are selling at prices that make them highly speculative. (This seems to have been borne out by their behavior in the 1962 decline, after the new edition was published.)

In matters of judgment, there is always room for disagreement, and the author's conclusions sometimes raise questions. For example, is it wise for individuals to confine their "defensive" investments solely to U. S. government or municipal securities, ignoring corporate bonds and other well-protected investments? Perhaps that is good advice for the average investor, but if yields should again diverge, could not the more sophisti-

cated buyer increase his yield substantially without sacrificing much in safety?

Are substantial cyclical swings in stock prices a thing of the past? The authors note that between 1948 and 1959 the maximum decline in stock prices was 22 per cent. Would the 27 per cent decline from December 1961 to June 1962 in the Dow-Jones Industrial Average be enough to change their minds about the stability of stock prices?

Although formula plans for timing have been found wanting, the authors favor some such device to avoid the temptation to follow the crowd in stock commitments. Dollar averaging is approved if adhered to over a period of ten years and the trend of stock prices is upward. But how do we know how long any trend will continue?

In choosing common stocks the "anticipation approach" is thought to be inferior to their well-known "valuation approach," (since the latter presumably is supported by facts, not expectations). Yet in any "valuation approach" some attention must be given to expected earnings, dividends and other factors that determine value, since the stockholder always buys the future rather than the past. The distinction seems to boil down to the difference between superficial guesses about the future and estimates based on a careful analysis of all of facts of the past.

It may be worth noting that the recent emphasis on "cash flow" rather than reported earnings receives scant support. The authors state: "In sum, we must express the view that the transfer of emphasis from net earnings to cash flow is not warranted by the underlying facts or by logic; that it has been inspired largely by the high price-earnings ratios created by the great stock-market advance; and that if persisted in or extended, it can introduce highly unsound concepts and practices into security analysis" (p. 176). Implicit in this, of course, is the assumption that stepped-up depreciation charges are true costs in light of higher cost plants and more rapid obsolescence. And the authors add the thought that the investor should deduct an added allowance for amortization and reduce reported earnings where stocks sell above their book values. This may be "conservative," but it seems to accord to book value an importance in stock valuation that is denied in other parts of the book. It also raises the question whether earnings should be written up where the stock is purchased below book value. (Apparently they would write up earnings where depreciation money is used to reduce debt or increase working capital, but not if it goes back into plant.)

The treatment of preferred stock as a sort of funded debt with "an imperfect creditor position" seems realistic in many cases, but it raises basic questions since legal rights are sometimes of real importance. In a later connection (p. 340), the authors themselves stress the advantage of bonds because of their unqualified right to interest, while the right to preferred dividends is contingent upon declaration.

Some of the most interesting and challenging chapters of the book are those in which the authors attempt to find a clue to solid and defensible levels of stock prices. The reader cannot help being impressed and enlightened by the wealth of material that is brought to bear on this problem. Out of the search comes the conclusion that, as compared with previous standards, stock values should be increased by about 50 per cent on the grounds that conditions have changed since 1951 in the ways already mentioned.

Thus, the proper level of stock prices would no longer be the capitalization of earnings at twice the yield on highest grade bonds, but at 1 1/3 times the bond yield. (This would warrant a level of 534 in the Dow-Jones industrial average at the beginning of 1962.) As an alternative, estimated future earnings on the D. J. I. A. ($44) would be capitalized at the rate of 7.7 per cent to yield a level of 572. This is quite a change from the level of 200–270 for 1950, which the earlier edition thought to be on the high side. The reader will be interested in the methods used in making earnings projections for the purpose of finding justified levels of stock prices. The authors have no illusions about the accuracy of such projections and warn that they must be accepted as essentially qualitative rather than quantitative in nature.

In the choice of individual stocks, a number of approaches are presented, but the authors continue to emphasize the "under-

valued stock" approach of the earlier editions. In their words:

> We incline strongly to the belief that this last criterion—a price for less than value to the private owner—will constitute a sound touch stone for the discovery of true investment opportunities in common stocks. (p. 433).

To this they add the other sound alternative of purchasing a diversified list at "reasonable" prices. The price-versus-value approach seems to the authors to be far more sound and practicable than attempts to choose growth stocks, although their methods involve earnings projections that to some may seem as difficult and uncertain as the estimate of future growth. Extrapolations of past trends and tying expected earnings to projected G. N. P. may be useful for stocks in general, but the authors warn against their use for individual stocks. But is not all of this highly conjectural?

The authors continue to stress the importance of dividends as a basis of stock value, but they now recognize that it may be wise policy for some companies to follow a low pay-out policy—particularly where strong growth or tax considerations are determinative. Unlike most writers, the authors defend the use of stock dividends if they are systematic and properly accounted for. Both tax considerations and convenience to the stockholder provide reasonable grounds for such a dividend policy. They disapprove of stock dividends from accumulated surplus rather than current earnings—a reversal of their previous position.

In valuing growth stocks, the dividend record can be ignored, but in stocks with poor growth rates the authors would weigh dividends far heavier than earnings. The latter position seems somewhat extreme.

Complicated mathematical formulas for determining values, (particularly of growth stocks) have not proved their worth and the authors state: ". . . we must express an ingrained distrust on our part of the employment of refined mathematical calculations to arrive at valuations which at bottom are based on inherently inexact projections or 'guesstimates' of performance for many years in the future." (p. 536).

Other conclusions about stock valuations that are now widely accepted are: (a) that book value is virtually ignored in the stock market; (b) that stock values and earnings multipliers are not adversely affected by reasonable amounts of senior capital; and (c) that stocks frequently sell for less than net current asset value, indicating possible "bargain" opportunities.

The authors suggest that there are times when intrinsic value computations should recognize the extra value of assets which did not contribute to the earnings of public utilities (cash or working capital in excess of needs). These assets, they suggest, should be added to the value based on capitalized earnings (p. 596). This is questionable advice as a general rule, since the crux of the question is whether these assets, if retained, can be made to enhance earnings. Cash assets accumulated for the purpose of replacing equipment, for example, might not increase earnings but simply prevent them from falling. Moreover, in many types of companies, it is well known that the market prices of stocks do not reflect surplus cash or working capital on anything like a dollar-for-dollar basis if there is no prospect of realization. Here again it is likely that qualitative rather than quantitative recognition is a more realistic approach.

The authors' treatment of the speculative aspects of security investments (warrants and convertible and participating features) is interesting and informative, as are their chapters on speculative bonds, leverage and low priced common stocks.

Some attention is given to the complex problem of the appraisal of management, with a clarion call for much more vigorous action by stockholders on this area. The stockholder should act like a part-owner and not default on his privileges and obligations in this area. The perennial problem here is how to bring this about.

On the whole there is hearty approval of the record and work of the S. E. C., but only a very brief and cursory analysis of the framework of federal security regulation.

Concerning today's investment problems, the authors are not at all convinced that the policy of full stock investment that has worked so well during the past fourteen years will prove to be equally wise for the present and future. They see at least an even chance of a severe setback somewhere

along the line and caution their readers that now may be the time to make themselves invulnerable by dividing their funds "in an appropriate way" between tax-free bonds and equities.

The new edition continues to embody the same basic philosophy and methods of investment analysis that have had such an impressive reception in the past. The extensive revision, the inclusion of much new and significant material, and the highly competent and experienced authorship make this an even more distinguished book in security analysis than the earlier editions. Within the scope of its coverage, it deserves a wide audience, and undoubtedly will continue to be one of the most popular textbooks in the field of security analysis. Any student of the broader field of investment will be wiser and more competent for having read this treatment that combines principle, experience and scholarship in admirable proportions.

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The Management of Bank Funds, 2d ed. By ROLAND I. ROBINSON. New York: McGraw Hill, 1962. pp. vii + 445. $7.95.

In this second edition of his well known text, Professor Robinson has once again demonstrated his extensive knowledge of, and insight into, the fundamental problems of bank financial management—the reflection of his many years of academic research and practical experience. Unusually well written, the book, in the main, accomplishes the difficult feat of walking the narrow line between straying into technicalities and merely stating the obvious, and thus should prove valuable to a wide range of readers. Students in banking and business schools, in particular, should find it a useful primary source, and the book, in addition, could profitably be used as supplementary reading in conventional money and banking courses. Moreover, it would be a rare person within the banking fraternity itself who would not gain some additional general insights from a careful reading of this volume, though professional bankers may well find the sections which deal with their particular specialties somewhat elementary.

The focus of the book is not on technical details, but on the basic principles which Professor Robinson believes should generally guide the commercial bank in allocating its funds. In the first chapter, Professor Robinson develops a set of priorities to govern this allocation. The highest priority is assigned to the provision of primary reserves, the second to maintaining an adequate level of secondary reserves, and the remaining funds are to be used to satisfy consumer and business loan demands. Only when these demands have been accommodated should the bank use any funds remaining for investment purposes. This schedule of priorities is similar to that followed by most banks, though as Professor Robinson well realizes, these priorities—with the possible exception of the first—are never absolute in practice, but must be balanced off against one another through the exercise of executive judgment.

After a brief discussion of the general economic environment within which the individual bank in the system operates, Professor Robinson turns in Part II (Chapters 4, 5, 6 and 7) of his book to the problems of providing adequate liquidity—the first and second priorities in his ranking. Chapter 4 deals with the general problems of liquidity, while Chapter 5 is devoted to the question of day-to-day management of the money position, and could be read with profit by many bankers at smaller and medium-sized institutions. Chapter 6 treats the question of secondary reserves for working purposes, and Chapter 7 the provision of secondary reserves for remoter contingencies, such as general swings in business conditions and changes in the particular economic environment in which a bank is located.

To Professor Robinson, lending is "the core function of commercial banking", the activity which banks perform the best, and the one to which the majority of their resources should be devoted. Reflecting this emphasis, Part III, comprising Chapters 8 through 17, which deal with bank lending, is the largest section of the book. In this section, Professor Robinson discusses the general principles which should govern lending in respect to terms and credit standards, and the various types of loans which should be made. Section V treats the question of bank

investments, dealing first with general principles, and then with the two main types of bank investment—Government and state and local securities. Section VI is concerned with the determinants and utilization of bank profits.

The reader may in some cases disagree with the choice of material and with the emphasis given certain topics. This reviewer, for example, would have found the book more valuable if there had been more references to various more detailed studies which illustrate Professor Robinson's general points. No bibliography is provided, and the references scattered throughout the text are both limited in number and in some cases not the most recent or best available. And, without in any way questioning Professor Robinson's set of priorities, the economic environment of banking at the present time might well have justified a somewhat greater emphasis on investment problems, and perhaps something more on problems of loans and investments abroad as more and more banks are moving into these fields. These objections are, however, minor when compared to the over-all value of the volume.

W. GILES MELLON
The Chase Manhattan Bank.

Techniques of Treasury Debt Management, By TILFORD C. GAINES. New York: A Joint Publication of the Graduate School of Business, Colombia University and The Free Press of Glencoe, 1962. pp. xi + 317. $7.50.

Gaines has packed into one volume: (a) a history of Treasury financing for the past century; (b) a sector-by-sector survey of the market for Treasury securities; (c) a description of the U. S. Government security market and how it functions in current debt management operations; (d) an analysis of the relationship between Federal Reserve credit policy and Treasury debt mangement; and (e) the author's proposals for public debt management policy.

The description of the U. S. Government security market and of prevailing debt management techniques in chapters V and VI is the most useful part of this volume. It is clear and authoritative; no parochical point of view is evident. The expository excellence of this section can be compared with Roosa's *Federal Reserve Operations in the Money and Government Securities Markets,* and the two might well be assigned jointly to undergraduate classes.

The author's proposals for debt management in Chapter VII were doubtless considered by him to have been his major contribution. The principal proposal is that Treasury debt management should avoid cycle-aggravating tactics and should aim at a neutrality of economic influence. He also suggests more generous pricing policies by the Treasury. Regularity would be accomplished by having Treasury debt management operations almost wholly on a scheduled and preannounced basis; a policy aimed at minimizing market uncertainties.

Both proposals have merit. Random and unpredictable public actions are unsettling in any market. If fiscal policy is economically rational, debt management can be "mechanized." Furthermore, excessive penny pinching in debt management is short sighted; if you want repeat customers they need to be rewarded. The author, now a commercial banker, presents a brief for more generous treatment of banks. This point of view has, in fact, a great deal of merit. However, advance commitments have their dangers; fiscal policy will not always be as rational as Gaines would want it to be.

The analysis of Federal Reserve policy and its relationship to Treasury debt management in Chapter VII is a curious mixture of elements. Where Gaines describes operational practices, he merits praise, as in chapters V and VI. On matters of economic analysis, his score should be lower. He interprets Federal Reserve policy as having focussed on MV and as having taken account of the M_2, or asset money balances. A far more accurate account would have been that Federal Reserve policy pays only nominal attention to either M or MV, but is deeply concerned with business conditions (interpreted in traditional Federal Reserve terms), with the state of money and capital markets, and with interest rate movements. Gaines does, however, present an interesting suggestion of balancing the liquidity trap with an "illiquidity trap." The idea is analytically

intriguing and might profitably have been pursued further.

The author, although a classic liberal in economic philosophy, seems to be imbued with the Treasury prejudice against speculators in Treasury securities—unless they be dealers or market professionals.

The least useful part of this volume is the historical segment in chapters II and III. Too much has been attempted in too brief a space. Our narrator runs breathlessly, flinging dogmatic evaluations over his shoulder. It is better to ignore this section than debate it.

This study will inevitably be compared with Murphy's *National Debt in War and Transition*, which was published a dozen years earlier. Both authors had considerable high-level experience in debt management. Both documents were prepared as doctoral dissertations, and both are flavored with strongly individual points of view. It might also be added that both are works of high quality. In terms of economic philosophy, the views of Gaines are rather more to this reviewer's taste. The differences between the two, however, would unquestionably have been far less, if both had been written in 1950—or in 1962 for that matter. On maturity of historical judgment and subtlety of interpretation, the nod goes to Murphy by a slight margin. Murphy is less dogmatic and a more penetrating interpreter of the period he covered. As a prose stylist Murphy is a clear winner.

ROLAND I. ROBINSON
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Free Reserves and the Money Supply. By A. JAMES MEIGS. Chicago: University of Chicago Press, 1962. 117 pp. $4.

The subject of the study under review is the relationship of free reserves (excess reserves minus borrowing) to deposit creation by the banks. According to the reserve position doctrine, the volume of free reserves is the appropriate yardstick for estimating potential changes in the volume of demand deposits. Meigs analyzes this doctrine critically, reformulates it, and subjects it to extensive statistical testing.

The importance of this study is clear. If the level of free reserves is the right measuring rod, how should it be interpreted? That is, what is the *quantitative* relationship between changes in free reserves and changes in the volume of demand deposits? If, on the other hand, it is not a good yardstick, its use in the formulation, execution, and interpretation of monetary policy should be discontinued.

The principal fault of the doctrine, according to Dr. Meigs, is the ". . . tendency to interpret equal values of free reserves as having approximately equal influence on bank behavior at all times." This appears to be a less than generous presentation of the doctrine, since its proponents will certainly agree that the desired level of free reserves is influenced by several variables. Nevertheless, Meigs' criticism is welcome, for it calls attention to the pitfalls of the reserves position doctrine when not fully and explicitly formulated, as, indeed, it has never been prior to Meigs' treatment.

In his excellent theoretical analysis, Meigs presents a modified version of the reserve position doctrine. Very briefly, banks desire to hold free reserves because of the safety they provide against possible clearing drains; the higher the free reserve ratio (the ratio of free reserves to deposits), the greater will be the margin of safety. Against the utility of holding free reserves, the bank must consider their costs. These are represented by the market interest rate and the Federal Reserve discount rate. Thus, Meigs stresses, with a given free reserve ratio, the banks may expand deposits at one time—when interest rates are rising and thus raising the opportunity cost of free reserves; and at another time, the same ratio may be associated with contraction of deposits—if interest rates are falling. *The rate of change* of free reserves depends on the above, plus (a) the rate of change of unborrowed reserves by the Federal Reserve, and (b) the difference between desired and actual free reserves—the larger the difference, the greater is the rate of change.

Meigs tests the explanatory value of these variables, using regression analysis. His dependent variable is the rate of change of deposits. (It is a proxy for the rate of change of free reserves.) A number of estimating equations were fitted, using various deposit series, time periods, and interest rates.

Based on the results of these tests, one concludes that even the reserve position doctrine as modified by Meigs, cannot be used for predicting deposit changes by the banks. This conclusion casts a serious doubt on the usefulness of the free reserve ratio as a gauge for purposes of monetary policy.

The second subject in Meigs' empirical investigation is the predictability of free reserves. The dependent variables in the estimating equations are the level and rate of change of free reserves. The explanatory variables are the interest rate (a number of variations are used), the discount rate, and the rate of change of unborrowed reserves, and seasonality (month of the year). Typical of Meigs' thorough empirical analysis, these variables are introduced in numerous forms—no less than twenty-four regression equations were fitted for the estimation of the (monthly average) free reserve ratio. Generally, the chosen variables seem to explain most of the observed variance in the level of free reserves.

The tested model cannot be regarded as complete because it does not include several additional variables which may be expected to affect the desired ratio of free reserves. These are: changes in float, changes in asset composition of banks' holdings, and changes in size and geographical distribution of banks. Meigs mentions some of these factors in his theoretical discussion, but does not include them in the tests. More generally, one wonders how useful can the predictive equations be, considering that the significance of the free reserve ratio has not been established in the earlier part of the study.

In conclusion, this book will be of great interest to students of monetary policy, first, because of the important topic it explores and second, because of its fruitful approach, which combines a rigorous theoretical analysis with careful empirical testing.

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Money, Trade and Economic Growth. By HARRY G. JOHNSON, Cambridge, Mass.: Harvard University Press, 1962. pp. 199. $4.50.

Three topics are covered in this volume: developments in international trade theory; the present state of the Keynesian debate; and the impact upon economic theory and policy of the fact that advanced societies are "affluent" and, when functioning normally, grow. The purpose of the essays is expository, to delineate the present state of the art; however, in general, the papers are not dull academic exercises typical of review articles, for the exposition is leavened by Professor Johnson's perceptive comments both on unsettled issues and on the true nature of the problems under examination.

Three elements unify these essays: an emphasis upon economic policy; the general theory of the second best (which is a theorem of welfare economics that is directly related to economic policy analysis); and the proposition that much of economics can best be looked at as special problems in capital theory.

The emphasis upon and interest in economic policy is evident not only in the choice of subject matter but also in the way in which problems are stated. For example, Johnson identifies the developments in balance of trade theory during the past twenty years as a change ". . . from the idea of a mechanism of adjustment to the idea of the balance of payments as a policy problem" so that the analytical problem has become the study of ". . . alternative ways of rectifying the balance of payments disequilibrium." The paper on the balance of payments not only shows the progress that has been made in the recent past, it also makes evident the weakness of the tools with which analytical economists approach balance of payments problems such as the United States is now experiencing. The material in the tool-box treats balance of payments problems as income-expenditure-trade rather than as financial-portfolio-investment problems. The American balance of payments problem is a liquidity problem, arising out of lending and investing long and financing a part of this long investment either by borrowing short or decreasing cash balances. The adjustment mechanism and policy choices affect both trade and financial variables, but the analytical mechanism as presented by Johnson runs entirely in trade terms: Hence it is of limited usefulness for the analysis of the current policy problem.

The essays on commercial policy and customs union center around the well known second-best theorem which can be stated as follows: 'If at least one of the conditions for maximum welfare cannot be obtained, then there is a presumption that the achievement of maximum attainable welfare will require violations of other conditions of maximum welfare.' Three important propositions dealing with customs unions and commercial policy are developed: that if two countries are alike but can become complementary specialists, there is a large potential gain from economic unification; that the freeing of trade between two countries may generate losses if it leads to sufficient trade diversion; and that the fundamental problem of a customs union is the determination of the height and pattern of the common tariff. This last proposition is, of course, the core of the policy problems now dividing the common market countries and the United States. An implication of the analysis is that the benefits to the common market countries of the common market is inversely related to the height of their external tariff.

A proposition to the effect that the benefits from freeing trade depends upon the extent that it is multilateral rather than discriminatory seems to be implicit in the argument. If this is true, then the interwar pattern of commercial policy, embodied in the reciprocal trade acts, was more beneficial than is the postwar pattern, in which trading blocs and customs unions are looked upon with favor.

The two essays dealing with monetary theory state the issues in the Keynes-Classics controversy and indicate some of the progress that has been made. Johnson perceptively points out that the underemployment equilibrium of Keynes is really not an equilibrium: rather it is a representation of a dynamic process among markets with widely differing rates of adjustment, some of which are much too slow for practical purposes. He also argues that Keynesian economics would be improved if consumer demand and portfolio choices were analyzed as special capital problems. Aside from the fact that the Keynesian treatment of money as an asset is a capital theoretic view of money, Johnson neglects the view, embodied in the user costs doctrine, that the present value of future returns determines present supply. As Johnson views labor as a heterogeneous embodiment of investment in his essays on an opulent society, it should be noted that a consistent capital theoretic view of labor supply, as reflecting present value of future services, can lead to the Keynesian supply curve of labor.

The last two essays in this volume deal with the opulent (affluent) society. They are first rate; they are the best statement I have come across of the analytical and policy issues brought forth by the fact of affluence. Johnson's economic analysis of an opulent society is based upon ". . . the role of capital in two contexts—consumption and the nature of labor"—and the economic policy suggestions are based upon a recognition that the risks to labor rises as labor increasingly becomes differentiated due to the needs of technology and the increased investment in humans. As the opulent society grows when it is functioning well, and as its growth is mainly due to change rather than to accumulation, each laborer must carry risks of becoming technologically obsolete. The combination of risk aversion, as a characteristic of preference systems, and ever increasing risks, due to the nature of the accelerating technical dynamism, implies that there is a large payoff in welfare from broad social insurance and expansion schemes. In addition, the way in which opulence and urbanism are related implies that an ever expanding set of economically significant external benefits and costs exists. From these two sources, risk and externalities, Johnson draws powerful arguments for intervention by way of welfare measures as well as the provision of services.

To summarize, this is a collection of important and provocative essays which should be of use to students, professional economisits and educated lay-men.

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Monetary Control. By ELMER WOOD. Columbia, Missouri: University of Missouri Press, 1963. 228 pp. $5.98.

To an already large literature on monetary

policy, Elmer Wood has added this non-technical exposition of the techniques and instruments of monetary control in the United States. As a treatise addressed to "all readers interested in finance whether their experience has been theoretical or practical," it breaks no new ground.

Wood begins by presenting a general view of the influence of monetary policy on prices and economic activity. A number of topics; e.g., the effect of debt structure and monetary control, are rather tersely presented with little supporting discussion and no footnote references to the literature, a source of continual annoyance throughout the book.

The second and third chapters discuss the general procedures of the Federal Reserve in controlling the money supply and the objectives of policy. The discussion here is quite general and seems designed as an introduction for the beginner.

The third chapter discusses the organization and functioning of the Federal Reserve. The emphasis here is on how the various portions of the monetary system work together to produce the monetary climate. The relationship between the Fed and the Treasury is discussed in some detail.

The next three chapters concern open market operations, reserve requirement policy, and discount policy. They provide expanded discussions of the topics introduced in Chapter II. The treatment of these tools of monetary control is somewhat superficial, though substantially correct. Again the lack of reference to relevant literature prevents the reader from benefiting from the discussion as much as possible and also blurs the distinction between Wood's own statements and those drawn from other sources. The whole discussion of monetary techniques is likely to confuse the beginner and bore the professional.

The final chapter presents a highly simplified account of the influence of money on the rate of spending. The extremely superficial discussion seems to have been largely uninfluenced by recent theoretical and empirical findings. In Wood's view the major impact of monetary policy on spending is through the mechanism of interest rate changes, although some credence seems to be given to the so-called "availability doctrine."

An appendix discusses the creation of bank deposits. While correct, the presentation, compared with the expositions usually made in terms of T-accounts, is more likely to confuse the beginner than to provide enlightenment.

In terms of professional enlightenment the book has little, if anything, to offer the competent student of monetary theory and policy; for the layman or beginner, much better introductions, such as *The Federal Reserve System: Purposes and Functions,*[1] are available. The lack of footnote references to additional sources sharply reduces the value of the discussion, both for the beginner seeking additional information, and for the professional anxious to follow some interesting point or to evaluate Wood's particular contribution.

All things considered, it is difficult to justify the book as a serious offering of a University Press.

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[1] Board of Governors of the Federal Reserve System, Washington, D. C., 1961, 228 pp.